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PROTOTYPE OIL SHALE LEASING PROGRAM

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TRACT C-b

QUARTERLY REPORT #2

(Through February 28, 1975)

Submitted to:

Mr. Peter A. Rutledge
Area Oil Shale Supervisor
Conservation District
U. S. Geological Survey
Grand Junction, Colorado

By:

Ashland Oil, Inc.
Atlantic Richfield Company, Operator
Shell Oil Company
The Oil Shale Corporation

APRIL 14, 1975

SHOUT
SHARE
IT

QUARTERLY REPORT #2

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SECTION II C

AIR QUALITY

The air quality program is concerned with both measurements of atmospheric gaseous constituents and meteorological processes which affect their transport and diffusion.

Table II C-1 of Quarterly Report #1 summarized data experimental programs in four areas: air quality and surface meteorology, low altitude meteorology, upper air studies and visibility. The fifth area, atmospheric diffusion studies, will utilize a combined experimental, analytical approach. A comparison table, II C-2, reported associated sampling frequency and averaging times for the four experimental programs.

An intensive, 24-hour "quick-look" at the air quality and meteorology of Tract C-b was conducted on 28-29 January 1975 and is included as reference 8 at the end of this section.

Table/Fig. No.	Description	Page
Table II C-1	References for the Basic Data These references are contained at the end of this section. See also Table II C-2.	II C-2
Table II C-2	Air Quality and Meteorology Basic Data Presentation Guide This table summarizes the types of data presented in all the basic references at the end of this section.	II C-3

TABLE II C-1

REFERENCES FOR THE BASIC DATA
(Contained At The End Of This Section)

1. Air Monitoring Report for C-b Shale Oil Project. October 1974. Report No. 2. Radian Corporation, Austin, Texas. Radian Contract RC #100-056. 8 January 1975. 211 p.

2. Air Monitoring Report for C-b Shale Oil Project. November 1974. Report No. 3. Radian Corporation, Austin, Texas. Radian Contract RC #100-056. 23 January 1975. 230 p.

3. Air Monitoring Report for C-b Shale Oil Project. December 1974. Report No. 4. Radian Corporation, Austin, Texas. Radian Contract RC #100-056. 4 March 1975. 219 p.

4. Quarterly Report. Air Monitoring for C-b Shale Oil Project. September 1974 - November 1974. Radian Corporation, Austin, Texas. Radian Contract RC #100-056. 24 January 1975. 390 p.

5. Upper Air Studies Over Federal Oil Shale Tract C-b During Winter 1975. E G & G Environmental Consultants, Albuquerque, New Mexico. Contract No. 66123. Report No. AL-EC-117. 14 March 1975. 101 p.

6. Upper Air Comparison Studies for Winter 1975 Between Federal Oil Shale Tracts C-a, C-b and Grand Junction, Colorado. E G & G Environmental Consultants, Albuquerque, New Mexico. Contract No. 66123. Report No. AL-EC-116. 14 March 1975. 190 p.

7. Air Monitoring and Analytical Determinations of Volatile Trace Metals at the C-b Tract. Sampling Date January 27, 1975. The Oil Shale Corporation. Laboratory Data Letter 75-23. February 6, 1975. 6 p.

8. A 24-Hour "Quick-Look" at the Air Quality & Meteorology of Tract C-b. 28 January - 29 January 1975. C-b Shale Oil Project, Denver, Colorado 182 p.

9. An Analysis of Air Temperature Inversion Characteristics of the Piceance Creek Basin, Western Colorado. William Marlatt and Associates, Fort Collins, Colorado. Report No. 1. March 12, 1975 11 p.

TABLE II C-2

AIR QUALITY & METEOROLOGY BASIC DATA PRESENTATION GUIDE

Ref. No.	Data Type	Presentation
1, 2, 3	1) All trailer data for air quality and meteorology (see 3 below)	Monthly average values
	2) Meteorological Tower (see 3c below)	Monthly average values
	3) Air quality and meteorology a) NO_x, NO, NO_2, THC, CH_4, Non-Methane HC, CO, O_3, Precipitation	Daily averages for trailer locations 020, 023
	b) SO_2, Particulates, H_2S, Temperature, Wind Speed, Wind Direction, Relative Humidity	Daily averages for trailers 020, 021, 022, 023, 024
	c) Meteorological Tower @ 4 heights: Wind Speed, Wind Direction, Relative Humidity, Temperature	Daily Averages
	4) All trailer data for air quality and meteorology	Maximum 5-minute averages and time of occurrence
	5) Air Quality a) NO_x, NO, NO_2	5 Maximum Independent Sliding Averages: 1-hour durations
	b) SO_2	30-min. duration, 3-hour durations, 24-hour durations
	c) THC, CH_4, Non-Methane THC	3-hour durations 1-hour durations 1-hour durations, 8-hour durations @ 6 a.m.
	6) Air Quality & Meteorology: Wind Speed, NO_x, NO, SO_2, H_2S, THC, CH_4, O_3, CO	Monthly Frequency Analysis - Bi-variate distributions of concentration with Wind Direction for 5-minute samples
	7) Air Quality & Meteorology: Wind Speed and Direction, Temperature Relative Humidity, NO_x SO_2, H_2S, THC, CH_4, O_3, CO	Hourly Diurnal Variations for each day of the month

TABLE II C-2 (Continued)

AIR QUALITY & METEOROLOGY BASIC DATA PRESENTATION GUIDE

Ref. No.	Data Type	Presentation
4	1) Quarterly AQ Summary of Concentrations	By trailer: a) Averages, Max. 24-hr., Max 8-hr., Max. 3-hr. Max. 1-hr., Max 5-min for the quarter b) Daily averages for each of 3 months
	2) Quarterly Concentration Distributions	Number of 5-min. samples by wind direction and level by trailer for the quarter
	3) Wind-rose Frequency Distributions	a) Monthly frequency distributions for the 100 ft. level on the meteorological tower by stability class b) Quarterly frequency distribution for the 100 ft. level by stability class
	4) Diurnal Variation of AQ and Meteorological Parameters	Monthly average hourly values for each of these months
5	1) Upper Air Studies (~200' to 6000') a) Winds aloft	Daily Pibal releases over 15-day period - (4 per day maximum) 1) Tab data - Time, azimuth, elevation, height, x-y coordinates, velocity 2) Polar trajectories
	b) Temperature profiles	Temperature vs. altitude plots over 15-day period (4 per day maximum)
6	1) Upper Air Studies (~200' to 6000') a) Winds aloft b) Temperature profiles c) Atmospheric stability	Correlations of ref. 5 data with C-a tract and with Grand Junction plus atmospheric stability correlations as obtained from slope of temperature-altitude curve @ 1000' and using Pasquill-Gifford stability classification scheme
7	1) Analytical determination of volatile trace metals: arsine, selenium, mercury	Table showing concentrations

TABLE II C-2 (Continued)

AIR QUALITY & METEOROLOGY BASIC DATA PRESENTATION GUIDE

Ref. No.	Data Type	Presentation
8	1) 24-Hour Intensive, "Quick-Look" at all the Air Quality and Meteorology of the C-b Tract from January 28-29, 1975	a) Computer hardcopy of 5 min. averages of all AQ and low altitude meteorology data for 5 stations, including Met. Tower with bivanes operational at 100' and 200' b) Cloud and sky conditions (hourly) at the tract, location 023 (incl. temp. at 8', RH at 8', wind dir. at 30', wind speed at 30', Pasquill stability, net radiation index) c) Hourly meteorological observations at the C-b tract d) Hourly meteorological conditions at Grand Junction e) Synoptic reports for Grand Junction f) Meteorological summary g) Bivane vertical component of wind direction and associated standard deviations as 1 min. averages h) Effects of averaging time on σ_ϕ and Stability Class i) Acoustic sounder strip charts j) Acoustic sounder tabulated data of heights of turbulance layers and inversion layers k) Skew T, log p diagrams for Grand Junction l) Temperature sounding plots m) Temperature sounding tab. data (temp. vs alt.) n) Pilot balloon soundings o) Volatile trace metals (mercury, arsenic, selenium) p) Particulate size distribution via Anderson Sampler (Met Tower) q) SO_2 impinger sampling at Met Tower r) H_2S sampling via MSA portable sampling pump at SG1 & AT1

TABLE II C-2 (Continued)

AIR QUALITY & METEOROLOGY BASIC DATA PRESENTATION GUIDE

Ref. No.	Data Type	Presentation
9	Air Temperature Inversions	Inversion characteristics, frequency analyses of number of occurrences, time of onset, time of breakup and sample data.

AIR QUALITY AND SURFACE METEOROLOGY

Under the lease stipulations, air quality data are required over at least 90% of the lease year at four stations, one of which is at (or as near as practicable) the expected point of maximum concentrations. Sulfur dioxide, hydrogen sulfide, and suspended particulates are required to be monitored at all stations. Hydrocarbons, oxides of nitrogen "and other pollutants" are also required to be monitored as directed by the Mining Supervisor. The required air quality monitoring system was completely operational as of 1 November 1974. Subcontractor (Radian Corp.) data reports for air quality and low altitude meteorology have been furnished through December 1974 as of the cutoff date of 28 February 1975 for this quarterly progress report. Figure II C-1 of Quarterly Report #1 shows the locations of the 5 air quality trailers and the meteorological tower. Trailers 020, 021, and 022 are located in the Piceance Creek valley at Redd Ranch, Rock School and the Gerald Oldland Ranch, respectively; trailers 023 and 024 are on the tract at the meteorological tower and on the ridge between Cottonwood and Sorghum Gulches, respectively.

Table/Fig. No.	Description	Page
Table II C-3	Air Quality Summary, Trailer 020 This table summarizes air quality data maxima from Ref. 4 for the quarter (September, October, November, 1974). Data for trailers 021, 022, 023 follow. Table VI of Ref. 3 gives the daily average concentrations for the quarter.	II C-8
Table II C-4	Trailer 021	II C-9
Table II C-5	Trailer 022	II C-10
Table II C-6	Trailer 023	II C-11
Table II C-7	Trailer 024	II C-12
Table II C-8	Particulate Concentration Distributions This table summarizes the frequency distributions of particulate concentrations along with the geometric mean concentration.	II C-13

Basic data on air quality and surface meteorology are contained in References 1 through 9 at the end of this section.

Air Quality and Surface Meteorology

TABLE II C-3 QUARTERLY SUMMARY (SEPTEMBER '74 - NOVEMBER '74)
(Concentrations in Micrograms per Cubic Meter)

TRAILER NO. 020

Recorded Parameter	Average	Maximum 24-hr. Concentration		Maximum 8-hr. Concentration		Maximum 3-hr. Concentration		Maximum 1-hr. Concentration		Maximum 5-min. Concentration	
		Value	Time	Value	Time*	Value	Time*	Value	Time*	Value	Time*
SO_2	3.8	103.6	9/14 (16:00)			146.0	9/14 (16:05)	226.3[2]	9/18 (4:35)	264.4	9/14 (17:00)
H_2S	0.5							10.1	11/9 (20:00)	47.1	9/13 (15:30)
Particulates *	8.2[1]	133	11/29								
Total Hydro-carbons	899.					1847.5	10/7 (6:00)			2995.0	10/15 (12:50)
CH_4	826.1					1712.5	9/7 (6:00)			2995.0	10/15 (12:50)
Non-CH_4 Hydrocarbons	73.4					197.6	11/25 (6:00)			1950.4	10/25 (18:10)
O_3	47.4							139.4	9/30 (5:25)	574.6	9/30 (6:05)
NO_x	7.0							103.3	9/30 (15:55)	672.7	9/30 (16:05)
NO	1.7							44.3	11/10 (5:50)	74.9	10/6 (12:55)
CO	833.8			2023.0	10/4 (18:55)			4483.8	10/7 (5:50)	5661.8	10/17 (17:45)
NO_2	5.0							102.2	9/30 (15:55)	672.7	9/30 (16:05)

1 - Geometric Mean, 2 - 30-Minute Averaging Time, *Start of interval of occurrence.

* Certain days are not reflected in the overall average and maxima reported due to incomplete data for those days.

TABLE II C-4 QUARTERLY SUMMARY (SEPTEMBER '74 - NOVEMBER '74)
(Concentrations in Micrograms per Cubic Meter)

TRAILER NO. 021

Recorded Parameter	Average	Maximum 24-hr. Concentration		Maximum 8-hr. Concentration		Maximum 3-hr. Concentration		Maximum 1-hr. Concentration		Maximum 5-min. Concentration	
		Value	Time	Value	Time*	Value	Time*	Value	Time*	Value	Time*
SO_2	3.0	136	9/10 (22:00)			233/1	9/11 (12:30)	269.6[2]	10/7 (13:00)	742.1	9/11 (4:25)
H_2S	2.6							130.9	10/28 (20:00)	317.1	9/30 (17:30)
Particulates *	9.3[1]	71.0	11/21								
Total Hydrocarbons											
CH_4											
Non-CH_4 Hydrocarbons											
O_3											
NO_x											
NO											
CO											

1 - Geometric Mean, 2 - 30-Minute Averaging Time, *Start of time interval of occurrence.

* Certain days are not reflected in the overall average and maxima reported due to incomplete data for those days.

TABLE II C-5 QUARTERLY SUMMARY (SEPTEMBER '74 - NOVEMBER '74)
(Concentrations in Micrograms per Cubic Meter)

TRAILER NO 022

Recorded Parameter	Average	Maximum 24-hr. Concentration		Maximum 8-hr. Concentration		Maximum 3-hr. Concentration		Maximum 1-hr. Concentration		Maximum 5-min. Concentration	
		Value	Time	Value	Time*	Value	Time*	Value	Time*	Value	Time*
SO_2	6.0	113.5	9/29 (20:00)			254.6	9/30 (2:55)	707.9^2	9/15 (0:10)	1726.4	9/15 (0:35)
H_2S	0.6							14.1	10/1 (3:30)	1125.4	9/25 (17:30)
Particulates *	11.3^1	154.0	11/28								
Total Hydro-carbons											
CH_4											
Non-CH_4 Hydrocarbons											
O_3											
NO_x											
NO											
CO											

1 - Geometric Mean, 2 - 30-Minute Averaging Time, *Start of time interval of occurrence.

* Certain days are not reflected in the overall average and maxima reported due to incomplete data for those days.

TABLE II C-6 QUARTERLY SUMMARY (SEPTEMBER '74 - NOVEMBER '74)
(Concentrations in Micrograms per Cubic Meter)

TRAILER NO. 023

Recorded Parameter	Average	Maximum 24-hr. Concentration		Maximum 8-hr. Concentration		Maximum 3-hr. Concentration		Maximum 1-hr. Concentration		Maximum 5-min. Concentration	
		Value	Time	Value	Time*	Value	Time*	Value	Time*	Value	Time*
SO_2	1.75	17.2	10/11 (3:00)			39.9	10/15 (15:20)	52.5[2]	10/21 (16:55)	205.8	10/21 (17:25)
H_2S	0.0							121.5	10/26 (13:15)	161.9	10/6 (18:10)
Particulates *	10.5[1]	26.0	11/27								
Total Hydro- ** carbons	1064.6					18330.8	10/1 (6:00)			40376.3	11/21 (16:53)
CH_4	149.7					13989.8	10/1 (6:00)			21338.9	10/7 (0:05)
Non-CH_4 Hydrocarbons	933.0					17151.9	11/23 (6:00)			39816.2	11/22 (6:45)
O_3	--							104.5	10/2 (17:10)	216.9	10/2 (7:00)
NO_x	6.7							181.2	9/29 (8:50)	270.5	9/29 (9:20)
NO	4.4							124.5	10/1 (1:05)	432.4	9/28 (14:40)
CO	3703.6			14098.2	11/14 (14:55)			14563.1	11/14 (15:25)	36521.3	10/14 (6:05)
NO_2	4.6							178.2	9/29 (8:50)	234.7	9/29 (9:20)

1 - Geometric Mean, 2 - 30-Minute Averaging Time, *Start of time interval of occurrence.

* Certain days are not reflected in the overall average and maxima reported due to incomplete data for those days.

** High hydrocarbon readings reflect contaminated manifold.

TABLE II C-7 QUARTERLY SUMMARY (SEPTEMBER '74 - NOVEMBER '74)
(Concentrations in Micrograms per Cubic Meter)

TRAILER NO. 024

Recorded Parameter	Average	Maximum 24-hr. Concentration		Maximum 8-hr. Concentration		Maximum 3-hr. Concentration		Maximum 1-hr. Concentration		Maximum 5-min. Concentration	
		Value	Time	Value	Time*	Value	Time*	Value	Time*	Value	Time*
SO_2	0.2	12.5	10/23 (2:00)			14.4	10/23 (5:15)	14.8[2]	10/23 (3:50)	15.6	10/23 (2:05)
H_2S	0.0							8.3	11/5 (15:55)	12.5	11/5 (16:20)
Particulates *	23.7[1]	178.0	11/27								
Total Hydrocarbons											
CH_4											
Non-CH_4 Hydrocarbons											
O_3											
NO_x											
NO											
CO											

1 - Geometric Mean, 2 - 30-Minute Averaging Time, *Start of time interval of occurrence.

* Certain days are not reflected in the overall average and maxima reported due to incomplete data for those days.

TABLE II C-8

FREQUENCY DISTRIBUTION OF PARTICULATE CONCENTRATIONS

SEPTEMBER 1974 - NOVEMBER 1974 *

C-b SHALE OIL MONITORING PROJECT

SITE CONCENTRATION μg/m³	020	021	022	023	024
>260					
240-260					
220-240					
200-220					
180-200					
160-180					2
140-160			1		0
120-140	1		0		0
100-120	0		0		0
80-100	0		0		0
60- 80	0	1	0		0
40- 60	0	0	0		0
20- 40	0	3	1	4	0
<20	11	14	5	5	2
TOTAL (No. of samples)	12	18	7	9	4
GEOMETRIC MEAN (ug/m^3)	8.2	9.3	11.3	10.5	23.7

* Certain days are not reflected in the composite reported here due to incomplete data for those days.

LOW ALTITUDE METEOROLOGY

The lease stipulations require a meteorological tower to be established in reasonable proximity to the plant site to monitor, at least 95% of the time, wind direction and wind speed at three levels, one at least 100 feet above the surface, one at approximately 30 feet and one at an intermediate level. Temperature is required at two levels, one at least 100 feet above the surface and one at approximately 30 feet. Humidity is required at one level.

Low altitude meteorological tower data are obtained at 8', 30', 100' and 200' for wind direction and speed relative humidity, and temperature. Barometric pressure and daytime solar radiation are obtained at ground level. Temperature differences are obtained between the 30' and 100' levels and between the 30' and 200' levels.

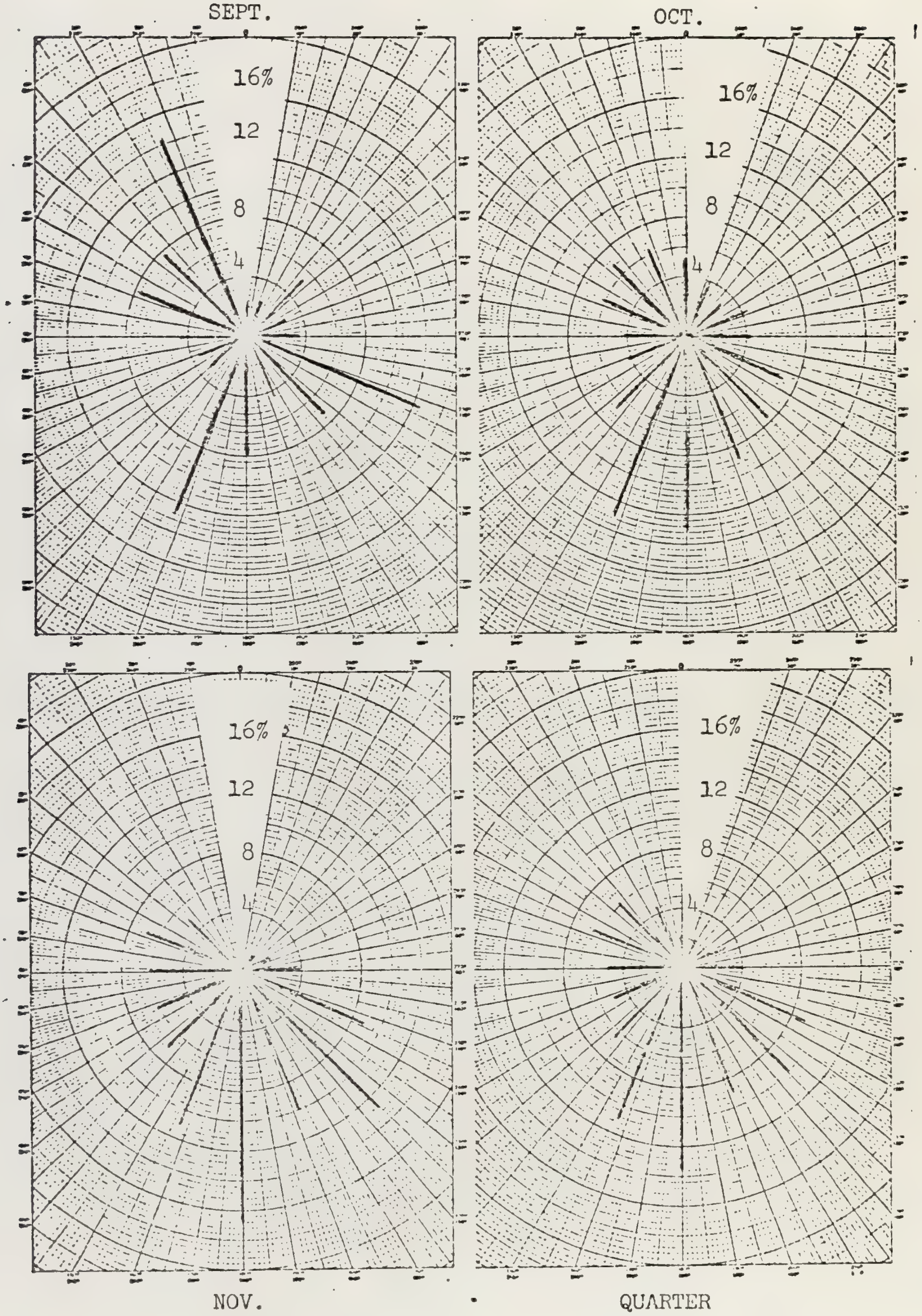
Basic low altitude meteorological data are contained in Refs. 1 - 4 through December 1974 (as for air quality) at the end of this section. Wind roses by atmospheric stability class are presented in Table VIII of Ref. 4 for the 100' level of the meteorological tower.

Table/Fig. No.	Description	Page
Figure II C-1	Wind Rose Diagrams This figure presents wind roses for the 100' level of the meteorological tower for September, October, November 1974, and the quarter.	II C-15

Low Altitude Meteorology

FIGURE II C-1

WIND ROSES AT THE METEOROLOGICAL TOWER (100')



Upper Air Studies

UPPER AIR STUDIES

There are no requirements in the lease stipulations for upper air studies. They are required in conditions of approval from the Mining Supervisor. Two winds-aloft and temperature profiles per day to altitudes of 6000 feet above the tract are required for a minimum of 15 days per quarter.

Data for this reporting period were obtained by E G & G consultants for the wind and temperature profiles during the 15 day period from January 20 to February 9, 1975. Winds aloft were obtained from pibal releases at the meteorological tower; temperatures aloft were obtained via an instrumented aircraft. These data are correlated with the C-a Tract and with Grand Junction.

Basic data of the types indicated above are presented at the end of this section in References 5 and 6 by the E G & G Environmental Consultants.

In addition to the above instrumentation, an acoustic sounder was installed (but not required) at the meteorological tower location by Wm. Marlatt and Assoc. (consultants) on December 7, 1974 and became operational as of 2 January 1975. It is used to assist in assessing atmospheric stability by determination of the height and time-extent of unstable layers and stable layers, including inversions.

During the "quick-look" investigation (Ref. 8), atmospheric stability was assessed by seven techniques:

1) temperature - altitude soundings
2) temperature differences on the meteorological tower
3) wind speed
4) solar radiation index
5) standard deviations in the horizontal component of wind direction
6) standard deviations in the vertical component of wind direction
7) acoustic sounder

Visibility

VISIBILITY

There are no visibility requirements in the lease stipulations; site visibility measurement are required in the conditions for approval by the Mining Supervisor.

A joint proposal request with the C-a Tract is currently being prepared.

Atmospheric Diffusion Studies

ATMOSPHERIC DIFFUSION STUDIES

There are no requirements in the lease stipulations for atmospheric diffusion studies. Conditions for approval from the Mining Supervisor require X/Q estimates for 24-hour and 3-hour averages.

These studies will be initiated at a future date when stack emission data become available.

An assessment of atmospheric stability will probably be required for input to diffusion models. This assessment has been initiated and is reported both in Subsection II C-3 and in Reference 8.

Radian AQ Data (Ref 1)

RADIAN
CORPORATION

RC#100-056

AIR MONITORING REPORT
FOR
C-b SHALE OIL PROJECT
OCTOBER 1974

Report No. 2

8 January 1975

Presented to:
C-b Shale Oil Project
Suite 555, Two Park Central
1515 Arapahoe Street
Denver, Colorado 80202

Attn: Mr. Max Legatski

Prepared by:
Radian Staff

II C-19

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APPENDIX A - STABILITY WIND ROSE DIAGRAMS.......... II C-196

I. GENERAL DESCRIPTION OF AIR MONITORING PROGRAM

Radian Corporation is under contract to C-b Shale Oil Projects to provide ambient air quality monitoring. Each site measures and records the concentration of particulates, sulfur dioxide, and hydrogen sulfide. In addition, two of the sites record the amounts of nitrogen oxides, total hydrocarbon, methane, ozone, and carbon monoxide. Selected meteorological parameters such as wind speed, wind direction, temperature, and rainfall are monitored at each station. A 200-foot meteorological tower at one of the sites provides meteorological information as a function of height.

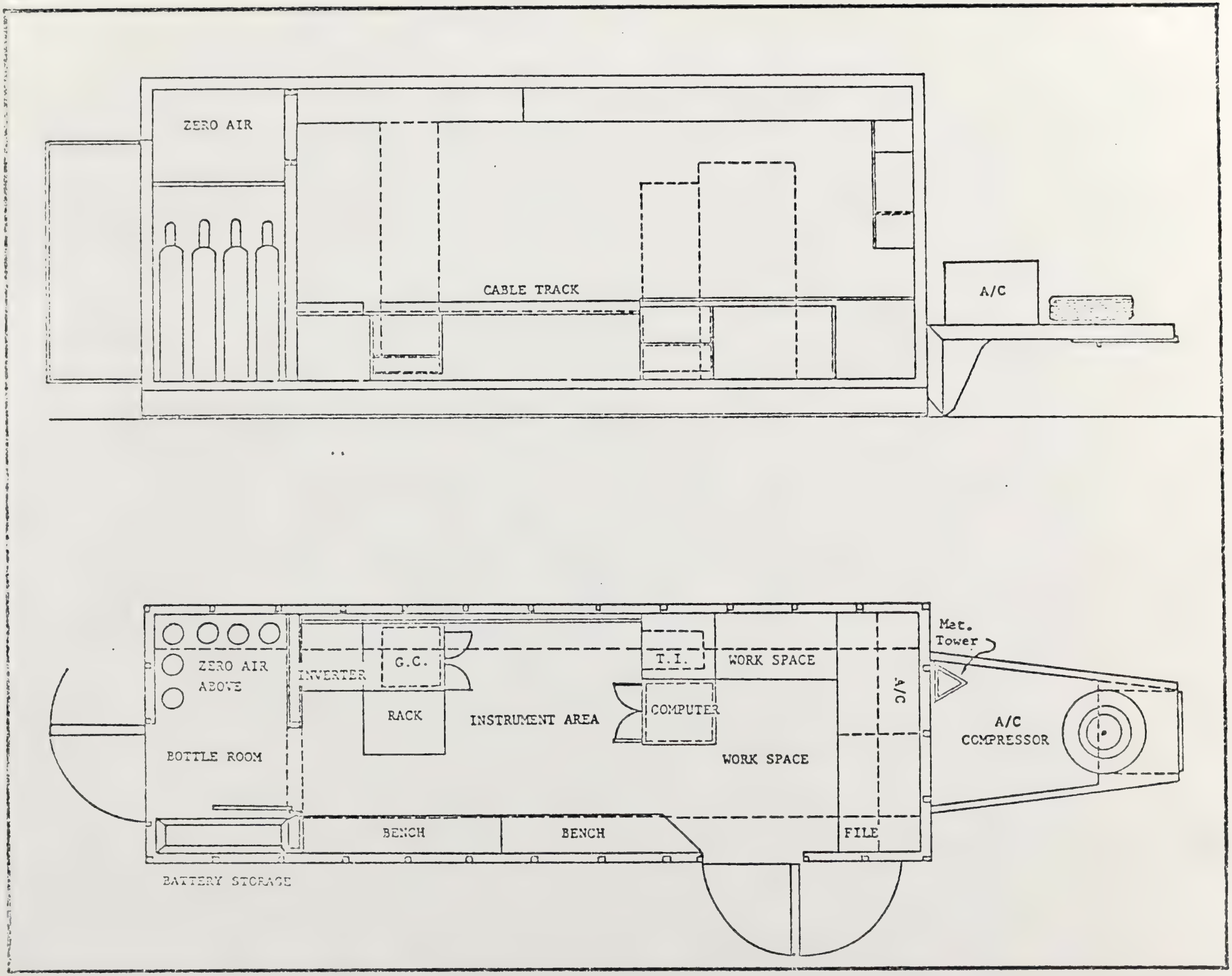
ZERO AIR
CABLE TRACK
A/C
ZERO AIR ABOVE
BOTTLE ROOM
BATTERY STORAGE
INVERTER
G.C.
RACK
BENCH
BENCH
INSTRUMENT AREA
T.I.
COMPUTER
WORK SPACE
WORK SPACE
FILE
A/C
Met. Tower
A/C COMPRESSOR

Figure 1

II. DESCRIPTION OF INSTRUMENT SYSTEMS

A. Air Quality Instrumentation

Nitrogen oxides are measured with a Meloy Model NA520 analyzer. This dual-channel analyzer is based on the chemiluminescent principle, and continuously monitors both NO_x and NO. A subtraction circuit in the instrument provides a continuous NO_2 output, but is not used in Radian's system. NO_2 is calculated once a second by the computer by subtracting the NO value from the NO_x value, thus avoiding any drift which might occur in the NO_2 output of the instrument. This instrument has a maximum detectable sensitivity of 5 ppb (parts per billion), and a linearity of 1%.

Both sulfur dioxide and hydrogen sulfide are measured with Meloy Model SA185 sulfur analyzers. The hydrogen sulfide analyzer uses a Meloy Model SO_x-1 sulfur dioxide scrubber and the sulfur dioxide analyzer uses a Meloy Model H_2S-1 hydrogen sulfide scrubber. The Model SA185 is a continuous analyzer, and utilizes the flame photometric principle of operation. The minimum detectable sensitivity is 5 ppb, and the linearity is ±1%.

Ozone is measured with a Meloy Model OA350 analyzer. This instrument provides continuous measurement of ozone, and is based on the chemiluminescent principle. The minimum detectable sensitivity is 0.5 ppb and the linearity is 1%.

Total hydrocarbons, methane, and carbon monoxide are monitored with a Bendix Model 8200 gas chromatograph analyzer. This instrument uses a plume ionization detector and has a minimum detectable sensitivity of 5 ppb for all three components. The Model 8200 works on a five-minute cycle, i.e., one air sample is analyzed every five minutes.

The air sample is drawn in through a glass cane and manifold supplied by the Ace Glass Company. The system has a 25mm diameter, and a constant air flow through the system is provided by an air pump rated at 60 cfm at 0" head pressure. The manifold has sampling ports to which ¼" teflon lines to the instruments are connected. All joints in the sampling system are secured by O-ring compression fittings. The manifold is contained in a heated (100°F) chamber to prevent condensation of moisture. The teflon lines from the manifold to the instruments are insulated with 1/8" wall thickness rubber tubing.

The trailer has four heavy duty high volume particulate samplers (Hi-Vols). Fiberglass filter paper is used for collection of particulate samples, and each filter is brought to a controlled humidity before weighing. Each Hi-Vol has a flow recorder to permit correction for changes in air flow as the filter becomes loaded with particulates. Each Hi-Vol runs for a 24-hour period (midnight to midnight), and is turned on and off by the computer. The Hi-Vols were designed following guidelines recommended by the Environmental Protection Agency and were manufactured by Radian.

B. Calibration Procedures

Each trailer contains a Meloy Model RAD-1 calibration unit. This instrument provides a zero air supply, SO_2 span gas from an SO_2 permeation tube, and NO span gas obtained by precisely diluting bottled NO span gas. The calibration of all instruments is automatically performed once a day, and is controlled by the computer. Each instrument is first switched to zero, and the computer monitors the output of each channel and takes a new zero reading after a stable zero signal has been reached. This zero reading is compared by the computer to the zero reading obtained 24 hours before, and if a drift in excess of 10ppb has occurred, an excess zero drift light for the channel in question is turned on on the System Status Panel. Next, span gas is supplied to each channel and the computer decides when a stable span value has been reached. This value is recorded and compared to the previous day's value. An excess span drift light on the System Status Panel is turned on if a drift exceeding 10ppb occurs. The instruments are then returned to the monitor mode, and after two minutes the computer resumes data taking.

The bottled NO gas used at each site was obtained from Precision Gas Products. Pre-purified grade hydrogen is used in the SO_2 analyzers.

The SO_2 permeation tubes were manufactured by Metronics Association, Inc. Their output has been verified by comparison to the output of National Bureau of Standards tube 10-42. Both SA185 analyzers in each trailer are calibrated with SO_2 from the permeation tube. This instrument responds to the number of sulfur atoms per molecule, thus SO_2 can be used to calibrate both the H_2S and SO_2 monitors

The Model OA350 ozone analyzer has its own calibration system which provides a zero check and a span check. The ozone calibration system is verified by comparison to a calibrated ozone generator maintained in Radian's laboratory in Rifle.

The Model 8200 total hydrocarbon, methane, and carbon monoxide analyzer is calibrated with undiluted span gas obtained from Airco's Rare and Specialty Gas Division. This span gas contains methane and carbon monoxide in air, the methane being used to calibrate both the total hydrocarbon channel and the methane channel. The Model 8200 is zeroed with air from a

Bendix Model 8834 zero air unit. In addition the instrument is electronically re-zeroed at the start of every five-minute cycle.

The Hi-Vol particulate samplers were calibrated using a Calibration Kit from General Metal Works.

C. Data Acquisition System

The basis of the data acquisition system is a Data General NOVA 1200 minicomputer. The NOVA which has a basic cycle time of 1.2 μsec is equipped with automatic program load and power fail/automatic restart features. The computer utilizes 16K 16-bit words of core memory. Analog-to-digital conversion is accomplished via an ADC built by Radian Corporation. The input/output unit for the system is Texas Instrument's KSR 733 keyboard/printer. This model teletype provides keyboard entry and hard copy printed output. The data are also recorded on a cassette magnetic tape unit with three drives. The cassette unit is utilized for program storage and loading as well as recording. The power to the teletype and cassette units is turned on only when the unit(s) is to be used to reduce wear on mechanical parts. Several important functions in the instruments as well as in the computer and the trailer are monitored by means of lights on a System Status Panel. These data lights are written onto cassette tape to monitor the complete status of the system every five minutes. The Data Acquisition System also monitors the presence of 110V power from the power lines. In its absence, the computer, which is powered by batteries, switches all trailer systems to battery-provided power. If the line voltage is restored before the batteries are discharged to a specified level, the trailer system is switched back to line power.

D. Meteorological Instrumentation

1. Ambient Air Monitoring Trailers

Four of the ambient air monitoring trailers are equipped with the following meteorological instrumentation: (1) dry bulb temperature (outside), (2) relative humidity, (3) wind direction, (4) wind speed, and (5) a tipping bucket, heated rain/snow gage. The temperature probe and relative humidity sensor are mounted inside a motor aspirated radiation shield, the Model 1S6 Aspirated Radiation Shield by Weather Measure, which gives an aspiration of approximately 100 cfm. The wind instrumentation and temperature and relative humidity apparatus (in the aspirated radiation shield) are all mounted atop a 33-foot crank-up meteorological tower (the WM-33, by Weather Measure) at each of the four trailer sites.

The wind instrumentation at the monitoring trailers consists of the Model W103/3L Lightweight Cup Anemometer by Weather Measure and the Model W104-2 Lightweight Vane by Weather Measure. The anemometer is a high response, low threshold wind system which offers the optimum in versatility and economy. For low threshold applications, a unique frictionless tachometer employing a high frequency oscillator and receiver is used to measure precisely wind speed. The oscillator, transmitter, and receiver are encapsulated in a small cube of epoxy for total protection against the environment. The high frequency tachometer embodies several distinct advantages over the commonly used light chopper systems. There are no light bulbs or photocells to burn out; power consumption is low; and the system is insensitive to moisture condensation or dust deposition. The solid state tachometer is essentially free from maintenance with a life of well over five years when operated continuously. The specifications of the W103 Cup Anemometer are as follows:

- Accuracy: ± 1% or .15 mph, whichever is greater.
- Bearings: Sealed and shielded precision stainless steel.
- Threshold: 0.6 miles per hour
- Distance Constant: 5 feet

The wind vane, the W104-2, is equipped with a 1000 ohm low torque potentiometer and two wipers for 0° to 540° operations. The response characteristics of this vane are:

- Dead Bank: 0 degrees
- Damping Ratio: 0.4
- Distance Constant: 3.5 feet
- Threshold: 0.75 miles per hour
- Potentiometer Linearity: 0.5%

The thermistor probe used in the motor aspirated radiation shields is the Model T621-TP18X Air Temperature Premium Thermistor Probe by Weather Measure. This probe has a range of -50°C to +50°C and an interchangeability of ± 0.055°C. The output signal accuracy is ± 0.3°F.

The relative humidity sensor is the Model 2013 Remote Reading Relative Humidity System by Texas Electronics. The sensor assembly contains a newly-developed hygroscopic inorganic sensing element. Its expansion and contraction positions the suspended core of a linear variable differential transformer (LVDT). The absence of friction inducing linkages and wiping contacts minimizes hysteresis and improves accuracy. The LVDT output signal, when processed, is directly proportional to relative humidity. The specifications of this instrument are as follows:

- Range of Indication: 0% to 100% RH
- Response: The sensor response time to a step change of 10% in relative humidity is less than 2 minutes with the sensor exposed to moving air.
- Accuracy: 5% - 15% RH; ± 5% RH
  15% - 95% RH; ± 2% RH
  95% -100% RH; ± 3% RH
- Signal Output: Analog signal of -150 mv. to +150 mv. with electrical zero at 50% RH is standard.

Each of the four monitoring trailers is equipped with a Model P511-E Remote Recording Heated Snow Gage by Weather Measure. In the case of this gage, the durability and reliability of a tipping bucket gage are combined with heavy-duty electric heaters to make this an all-purpose precipitation sensor. This gage may be used to measure snowfall and rainfall. An insulating cover of poly-vinyl chloride and a thermostatic control insure the proper gage temperature. The thermostatic control is adjustable from 0 to 35°C. Snow falling into the inlet funnel is melted. The resulting water (from rain or snow) drains into a precision tipping bucket mechanism which activates a mercury switch each time the bucket fills and tips. The gage is constructed of durable corrosion-resistant materials to provide many years of service. The specifications of this gage are as follows:

- Orifice: 8 inches
- Calibration: 0.01 inch
- Accuracy: 0.5% (Calibrated at 0.5 in/hr)
- Sensor: Chrome plated tipping buckets
- Switch: Mercury, 0.1 second closure
- Heat Control: Thermostat adjustment, 0 to 35°C.

2. 200-Foot Meteorological Tower

The tower has instrumentation at four levels: 8 feet, 30 feet, 100 feet, and 200 feet. At all four levels, there are: wind speed, wind direction, and temperature and relative humidity sensors in a power aspirated radiation shield. Temperature difference thermistors (also in power aspirated radiation shields) and their associated circuitry take lapse rate measurements for the 30-foot to 100-foot layer and the 30-foot to 200-foot layer. In addition, this site has a Precision Spectral Pyranometer, a barometer, and a tipping bucket rain/snow gage.

The wind direction and speed apparatus used at each measurement level of the tower is the Model 1074-2 wind sensor by Meteorological Research, Inc. (MRI). This sensor has a 540° potentiometer for wind direction and a light chopper for wind speed. This sensor is rugged, with an all-weather coaxial cup and damped vane assembly. The prototype model has been in operation for years under the most demanding weather conditions, performing continuously with the utmost reliability. All of the wind sensors on the tower have been specially treated with a black paint which will promote warming of the exposed surfaces of the sensor and thereby reduce ice and snow accumulations on the moving parts of the apparatus. The specifications on the Model 1074-2 are as follows:

Wind Speed

- Starting Threshold: 0.75 mph
- Response Distance: 18 feet (63% recovery)
- Flow Coefficient: 7.9 feet/Revolution
- Accuracy: ± 0.4 mph or 1% (whichever is greater)
- Range: 0-100 mph

Wind Direction

- Starting Threshold: 0.75 mph
- Delay Distance: 4 feet (50% recovery)
- Damping Ratio: 0.5 to 0.6
- Accuracy (540° system): ± 1%
- Range: 0° to 540°

The relative humidity and temperature sensors are mounted within a power aspirated radiation shield at each tower level. All aspirators and sensors are of the Model 840 Series by MRI. The aspirated shielded housing is designed to provide maximum radiation protection to the sensor. Ambient air is drawn into the shield and across the sensors at approximately 15 feet per second. This intake air is essentially sampled from a hemispherical space which is approximately 3-inch radius from the tube opening. Speed of the incoming air at the periphery of this hemisphere is approximately 1 mph.

The temperature sensor is comprised of a dual thermistor and resistor network. This circuit provides a linear resistance change with an air temperature change. The relative humidity sensor is placed alongside the temperature elements inside the shield where it is exposed to a constant flow of air. Circulation to both sides of the sensing element produces accurate monitoring with a good response time. The specifications on the sensing elements are as follows:

Temperature

- Accuracy: ± 0.25°C
- Range: -50°C to +50°C

Humidity

- Accuracy: ± 3.0% RH
- Range: 0% to 100% Relative Humidity

Measurements of temperature difference are taken for two layers, the 30-foot to 100-foot layer and the 30-foot to 200-foot layer. The thermistors and circuitry used for these measurements are separate from the thermistors measuring air temperature. The use of separate thermistors and circuitry to measure ΔT allows for much greater accuracy and resolution in the measurements, which is necessary for stability assessments. Two ΔT thermistors are at the 30-foot level, one is at the 100-foot level, and one is at the 200-foot level. All of these ΔT thermistors are mounted within power aspirated radiation shields. The specifications on the ΔT instrumentation are as follows:

- Accuracy: ± $0.1^{\circ}C$

- Range of ΔT Circuit
  (Lower Level-Upper Level): $+4^{\circ}F$ to $-8^{\circ}F$

All instrumentation, except at the ground level, is mounted at the end of 12-foot retractable booms. These booms are 3-inch box beams which are on rollers and can be retracted to the instrument platforms for instrument maintenance.

The meteorological tower itself is a 200-foot Rohn Model 80 Guyed Tower, designed for 40 pounds per square foot wind load with ½" of radial ice per EIA Standard RS-222-B, to support four levels of meteorological equipment. The material consists of tower sections with a tapered base, three retractable booms 12-feet long, three outside work platforms, an inside ladder for climbing, two base ground kits and one anchor ground kit. The cable-type Safety Climbing Device consists of a cable and attachment mechanisms with a locking sleeve and safety belt. The tower is lighted and painted according to FAA specifications.

The signals from the tower instrumentation are fed from multiple signal cables into transmitters mounted at the base of the tower. After signals have been converted to analog signals, they are fed into a junction box, also at the tower base, where they are assimilated into one coaxial cable. The signals are then run underground within 3" PVC conduit to the A-to-D assembly, where they are processed. The transmitters are shielded and insulated from the elements. The signal cable is run underground in PVC conduit in order to minimize damage from the weather or various rodents in the region.

The auxiliary equipment at the tower site consists of a heated tipping bucket rain/snow gage, an analog barometer, and a Precision Spectral Pyranometer. The rain/snow gage is the Model P511-E unit by Weather Measure, with characteristics and specifications as described in Section 1. The barometer is the B242 Analog Output Barometer by Weather Measure. This barometer provides an output voltage that is linearly proportional to pressure. The specifications on this instrument, which is mounted inside the monitoring trailer at the site, are as follows:

- Range: Specially designed for the 100 millibar interval from 725 millibars to 825 millibars.

- Resolution: Infinite

- Linearity: ± 0.5 millibar, over the 100 millibar interval

The pyranometer at the site is the Eppley Precision Spectral Pyranometer. This instrument is used for the measurement of sun and sky radiation totally or in defined wavelength bands. The pyranometer is levelled and mounted atop a wooden stand 4½ feet from the ground surface. Care has been taken to eliminate the effects from all outside influences, such as reflection or shadows, on the pyranometer. The instrument characteristics are as follows:

- Sensitivity: 5 mv. per cal/cm^2/min
- Independence: 300 ohms
- Temperature dependence: Sensitivity constant to within ± 1 percent over the ambient temperature range from -20 to +40°C
- Linearity: Response linear up to intensities of 4 cal/cm^2/min
- Response Time: 1 second (i/e signal)

All instrumentation is factory calibrated and is field-calibrated at various intervals. Sling psychrometers are used to calibrate the humidity sensors, known temperatures and/or resistances are used to calibrate the thermistors, and an rpm calibrating unit is used to calibrate the anemometers. The wind direction instrumentation is aligned to true north (reference direction) by means of a surveyor's transit.

III. MICROMETEOROLOGICAL AND TERRAIN FEATURES

The Piceance Creek Valley and C-b Oil Shale Tract are situated such that many microscale meteorological phenomena affect the region where the ambient air monitoring units are located. In particular, the three units in the Piceance Creek Valley (Trailers 020, 021, and 022) are heavily influenced by a katabatic-anabatic flow regime. Trailer 023 and its associated 200-foot meteorological tower are located atop a plateau to the south of the valley, high enough to be affected mostly by gradient flow conditions. Trailer 024, located halfway between the valley and the meteorological tower, is affected by a mixture of the gradient and mountain-valley flow regimes.

Elevations in the monitoring network range from about 6200 feet above sea level at Trailer 021, near the Rock Creek School in the valley at the westernmost end of the monitoring network, to 6940 feet at the meteorological tower site (Trailer 023) atop the plateau within the Tract C-b itself. The largest gradients in elevation in this area, of course, occur at the Piceance Creek Valley walls. However, the northern valley walls are slightly steeper than those at the southern boundary of the valley, which then slopes upward gradually toward the C-b Tract. The Piceance Creek Valley decreases in elevation from east to west in this area, so that nighttime katabatic cold-air drainage flows advect from east to west, or from Trailer 022 to Trailer 020 to Trailer 021.

As mentioned at the outset of this discussion, the terrain will have a large influence on the meteorology of this region. Considering first Trailer 022, at the eastern end of the monitoring network, a nighttime katabatic (valley or downslope) flow will exert a tremendous influence on this site.

Of the three monitoring locations in the Piceance Creek Valley, this site has the steepest valley walls in its vicinity. As a result, the nighttime katabatic flow is strongest here. That is, the downslope winds are constrained or channelled at this point such that the nighttime drainage winds often reach 15 miles per hour. In addition, the channelling effects of the Piceance Creek Valley walls normally cause surface winds to flow from one of two preferred directions. At night, the downslope winds parallel the valley contours, generally coming from 115° (east-southeast, referenced to true north). During the afternoon, or whenever suitable pressure gradient conditions exist, the winds generally come from the west-northwest because of the boundary conditions and channelling caused by the valley. This monitoring location has an elevation of approximately 6450 feet above sea level and is at the mouth of Oldland Gulch.

Trailer 020, midway down the Piceance Creek Valley near the Redd Ranch, at the mouth of Gardenhire Gulch, has an elevation of about 6320 feet above sea level. Once again, the valley walls are steeper to the north of this monitoring location. The Piceance Creek Valley widens a little from Trailer 022 to Trailer 020, so that channelling effects are not quite as great at this location. Nevertheless, a well-developed katabatic-anabatic flow cycle affects this site, with the afternoon anabatic flow being fairly well-developed at this location. The channelling effects of the valley walls cause two preferred surface wind directions, southeast and northwest. However, other wind directions are experienced here, particularly during the transition periods between downslope and upslope flows and during periods when the surface pressure gradient dictates to a large degree the surface wind direction.

Trailer 021, located near the Rock Creek School, has the lowest elevation of the three valley trailers, 6200 feet. At this point, the Piceance Creek Valley widens considerably toward the east, so that nighttime katabatic winds are rather light. Daytime anabatic winds are also rather light. However, northwesterly surface winds caused by pressure gradient forces are occasionally moderate in force because of the slight channelling effects of the valley walls to the north and northwest.

Site 023, where the 200-foot meteorological tower is located, is atop the plateau at an elevation of about 6940 feet above sea level. It is approximately 2.5 miles south of the Piceance Creek Valley. This location is relatively high compared to its surroundings, with the nearest points having elevations greater than 7000 feet being .5 miles to the south of the tower. The tower itself is on the top of a small knoll located between Scandard and Sorghum Gulches. Because of its location and the irregularities of the surrounding terrain, meteorological patterns are varied here.

Wind instrumentation is mounted at four levels of the meteorological tower: 8 feet, 30 feet, 100 feet, and 200 feet. The top level of the tower generally remains in gradient wind flow. That is, the winds at that level are normally generated by synoptic-scale features and are usually separated from terrain features and micrometeorological circulations. Occasionally, a weak anabatic flow influence is experienced. However, such is not the case with the three lowest measurement levels. To varying degrees, these levels are influenced by both the katabatic and anabatic circulation cells. However, when strong pressure gradient forces exist in the region and the synoptic-scale wind flow is strong, all four tower levels will reflect a gradient wind flow, with the winds increasing in strength with increasing height.

Trailer 024 is between the Piceance Creek Valley and the meteorological tower location, about 1 mile south of the valley itself. The elevation of this site is approximately 6740 feet. The terrain slopes downward to the west, north, and east, and slopes upward toward the south, in the direction of the meteorological tower. This site is in a transition zone between the micrometeorological effects which prevail in the valley and those meteorological phenomena affecting the tower site. As a result, the meteorological parameters measured at this location are subject to rather rapid variations. The area is generally affected by a weak katabatic (downslope) flow at night and a weak anabatic (upslope) flow during the afternoon hours. However, gradient wind flows generally take precedence over terrain-induced flows at this location.

The terrain atop the plateau is generally barren and fairly rugged, with a few scattered small trees. The topsoil dries rapidly and is very fine, resulting in blowing dust when dry, windy conditions exist. In the Piceance Creek Valley, the terrain is fairly grassy and flat, with steep valley walls on either side. Surface winds are normally rather light in this valley unless channelling effects occur.

During clear nights with rather light pressure gradient-induced winds, rapid radiational cooling will occur in the region because of the barren nature of the terrain and the generally dry character of the air in this portion of the country. As a result, the diurnal range of temperatures will be extremely large. Because of the katabatic flow in the valley, nighttime temperatures will generally be lower in the valley than on the plateau. During the winter, especially, temperatures in the valley may be 20°F lower than they are on the plateau during the early morning hours. In particular, the drainage effects will be spectacular at Trailer 021, which will often experience temperatures 10°F cooler than those at the other valley monitoring locations during the early morning hours. This phenomenon results from the pooling of cold air in the area of Trailer 021 because of its relatively low elevation and the light nature of the winds here during the night, which thus inhibits surface mixing and promotes the strengthening of the nighttime ground-based inversion. During periods of strong gradient winds and/or cloudy skies, greater mixing of the air near the surface occurs and meteorological conditions (particularly temperature and humidity) are more uniform throughout the monitoring network (on the plateau and in the valley).

IV. OPERATING TIME ANALYSIS FOR EACH SITE

This section presents the operating statistics for each of the major subsystems contained in each monitored station. Table II shows the specific number of hours that each of these subsystems was inoperative for the month. The column labeled "COMPUTER" indicates the entire data acquisition system and downtime hours appearing in this column and, therefore, means total loss of data. These instances include, in addition to computer downtime, power failures, no power available, and self-automated shutdown periods such as during air conditioner malfunctions.

Calibration time is not considered to be downtime and is, therefore, not included in the downtime figures. The amount of time used in calibrating the instruments is given at the bottom of the downtime analysis table and is reported as total calibration hours for each channel for the entire month. As is evident in the calibration figures, channels can be calibrated independently of one another. No calibration time is given for particulate monitoring since Hi-Vol calibration occurs infrequently and only during the off-duty cycle for each Hi-Vol while another Hi-Vol is taking data.

TABLE II.
DOWNTIME HOURS FOR ATLANTIC RICHFIELD MONITORING PROJECT

TRAILER 020

DATE	COMPUTER	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	WS	WD	RH	TEMP
10/ 1	0.	0.	0.	0.	24.	0.	24.	24.	10.	0.	0.	0.	0.	0.
10/ 2	3.	0.	0.	0.	24.	0.	11.	11.	0.	0.	0.	0.	0.	0.
10/ 3	0.	4.	4.	0.	24.	21.	23.	23.	0.	0.	0.	0.	0.	0.
10/ 4	0.	1.	1.	24.	24.	3.	22.	22.	0.	0.	0.	0.	0.	0.
10/ 5	0.	12.	12.	24.	24.	0.	21.	21.	0.	0.	0.	0.	0.	0.
10/ 6	0.	1.	1.	23.	24.	0.	13.	20.	11.	0.	0.	0.	0.	0.
10/ 7	0.	0.	0.	3.	24.	0.	17.	24.	18.	0.	0.	0.	0.	0.
10/ 8	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/ 9	2.	0.	0.	0.	24.	0.	22.	22.	22.	0.	0.	0.	0.	0.
10/10	0.	0.	0.	0.	0.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/11	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/12	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/13	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/14	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
10/15	0.	0.	0.	0.	0.	0.	13.	17.	13.	0.	0.	0.	0.	0.
10/16	0.	0.	0.	0.	24.	0.	0.	24.	0.	0.	0.	0.	0.	0.
10/17	0.	0.	0.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.
10/18	4.	0.	0.	0.	24.	0.	1.	11.	0.	1.	0.	0.	0.	0.
10/19	0.	0.	0.	0.	0.	0.	20.	20.	20.	0.	0.	0.	0.	0.
10/20	0.	0.	0.	0.	0.	0.	22.	22.	23.	0.	0.	0.	0.	0.
10/21	0.	11.	11.	0.	24.	0.	15.	15.	19.	0.	0.	0.	0.	0.
10/22	0.	24.	24.	0.	24.	0.	0.	23.	20.	0.	0.	0.	0.	0.
10/23	0.	0.	0.	0.	0.	0.	0.	23.	18.	0.	0.	0.	0.	0.
10/24	0.	0.	0.	0.	24.	0.	1.	3.	13.	1.	0.	0.	0.	0.
10/25	1.	1.	1.	0.	0.	0.	7.	13.	6.	1.	0.	0.	0.	0.
10/26	0.	0.	0.	0.	0.	0.	21.	21.	0.	0.	0.	0.	0.	0.
10/27	0.	0.	0.	0.	24.	0.	21.	21.	0.	0.	0.	0.	0.	0.
10/28	0.	1.	1.	1.	24.	1.	13.	13.	1.	1.	1.	1.	0.	0.
10/29	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/30	0.	0.	0.	0.	24.	0.	0.	20.	20.	0.	0.	0.	0.	0.
10/31	1.	0.	0.	0.	24.	0.	0.	15.	10.	0.	0.	0.	0.	0.
CALIBRATION TIME		6.	6.	5.		5.	12.	11.	12.	5.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR ATLANTIC RICHFIELD MONITORING PROJECT

TRAILER 022

DATE	COMPUTER	SO2	PART	H2S	WS	WD	RH	TEMP
10/ 1	2.	0.	24.	0.	0.	0.	0.	0.
10/ 2	0.	0.	24.	0.	0.	0.	0.	0.
10/ 3	0.	0.	24.	0.	0.	0.	0.	0.
10/ 4	2.	0.	24.	0.	0.	0.	0.	0.
10/ 5	24.	0.	24.	0.	0.	0.	0.	0.
10/ 6	24.	0.	24.	0.	0.	0.	0.	0.
10/ 7	24.	0.	24.	0.	0.	0.	0.	0.
10/ 8	24.	0.	24.	0.	0.	0.	0.	0.
10/ 9	24.	0.	24.	0.	0.	0.	0.	0.
10/10	24.	0.	24.	0.	0.	0.	0.	0.
10/11	24.	0.	24.	0.	0.	0.	0.	0.
10/12	24.	0.	24.	0.	0.	0.	0.	0.
10/13	24.	0.	24.	0.	0.	0.	0.	0.
10/14	24.	0.	24.	0.	0.	0.	0.	0.
10/15	24.	0.	24.	0.	0.	0.	0.	0.
10/16	24.	0.	24.	0.	0.	0.	0.	0.
10/17	24.	0.	24.	0.	0.	0.	0.	0.
10/18	24.	0.	24.	0.	0.	0.	0.	0.
10/19	24.	0.	24.	0.	0.	0.	0.	0.
10/20	24.	0.	24.	0.	0.	0.	0.	0.
10/21	24.	0.	24.	0.	0.	0.	0.	0.
10/22	24.	0.	24.	0.	0.	0.	0.	0.
10/23	11.	13.	24.	1.	1.	1.	1.	1.
10/24	0.	24.	24.	0.	0.	0.	0.	0.
10/25	0.	24.	24.	0.	0.	0.	0.	0.
10/26	0.	24.	24.	0.	0.	0.	0.	0.
10/27	0.	24.	24.	0.	0.	0.	0.	0.
10/28	0.	24.	24.	0.	0.	0.	0.	0.
10/29	0.	24.	24.	0.	0.	0.	0.	0.
10/30	0.	24.	24.	0.	0.	0.	0.	0.
10/31	0.	24.	0.	0.	0.	0.	0.	0.
CALIBRATION TIME		0.		1.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR ATLANTIC RICHFIELD MONITORING PROJECT

TRAILER 021

DATE	COMPUTER	SO2	PART	H2S	WS	WD	RH	TEMP
10/ 1	0.	0.	24.	0.	0.	0.	0.	0.
10/ 2	0.	0.	24.	0.	0.	0.	0.	0.
10/ 3	0.	0.	24.	0.	0.	0.	0.	0.
10/ 4	0.	0.	24.	0.	0.	0.	0.	0.
10/ 5	0.	0.	24.	0.	0.	0.	1.	0.
10/ 6	0.	0.	24.	0.	0.	0.	0.	0.
10/ 7	1.	0.	24.	0.	0.	0.	0.	0.
10/ 8	0.	0.	24.	0.	0.	0.	0.	0.
10/ 9	5.	0.	24.	0.	0.	0.	0.	0.
10/10	0.	0.	24.	0.	0.	0.	0.	0.
10/11	0.	0.	0.	0.	0.	0.	0.	0.
10/12	0.	0.	24.	0.	0.	0.	0.	0.
10/13	0.	0.	24.	0.	0.	0.	0.	0.
10/14	11.	0.	24.	0.	13.	0.	0.	0.
10/15	0.	0.	0.	0.	24.	0.	0.	0.
10/16	0.	0.	0.	0.	24.	0.	0.	0.
10/17	6.	0.	24.	0.	18.	0.	0.	0.
10/18	23.	0.	0.	0.	0.	0.	0.	0.
10/19	1.	0.	0.	0.	0.	0.	0.	0.
10/20	1.	0.	0.	0.	0.	0.	0.	0.
10/21	0.	0.	24.	0.	0.	0.	0.	0.
10/22	0.	0.	24.	0.	0.	0.	0.	0.
10/23	0.	0.	0.	3.	0.	0.	0.	0.
10/24	0.	0.	0.	0.	0.	0.	0.	0.
10/25	1.	0.	24.	0.	0.	0.	0.	0.
10/26	0.	0.	24.	0.	0.	0.	0.	0.
10/27	0.	0.	24.	0.	0.	0.	0.	0.
10/28	12.	0.	0.	0.	0.	0.	0.	0.
10/29	0.	0.	0.	0.	0.	0.	0.	0.
10/30	0.	3.	0.	0.	0.	0.	0.	0.
10/31	0.	0.	0.	0.	0.	0.	0.	0.
CALIBRATION TIME		6.		5.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 023

											--------- 8-FT ---------					
DATE	DIGITIZING SYSTEM	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	WS	WD	RH	TEMP	PYR	PRE
10/ 1	4.	0.	0.	0.	24.	0.	0.	0.	1.	0.	1.	0.	0.	0.	20.	20.
10/ 2	3.	0.	0.	1.	24.	0.	0.	0.	0.	0.	1.	0.	1.	0.	21.	21.
10/ 3	17.	0.	0.	1.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	7.
10/ 4	14.	10.	10.	1.	24.	0.	4.	4.	0.	0.	0.	0.	0.	0.	10.	10.
10/ 5	0.	24.	24.	0.	24.	24.	23.	23.	23.	20.	0.	0.	0.	0.	24.	24.
10/ 6	14.	9.	9.	0.	24.	9.	5.	5.	7.	10.	10.	0.	0.	0.	10.	10.
10/ 7	0.	5.	5.	0.	24.	16.	23.	9.	24.	15.	24.	0.	0.	0.	24.	24.
10/ 8	0.	24.	24.	0.	24.	0.	24.	24.	24.	24.	24.	0.	0.	0.	24.	24.
10/ 9	0.	24.	24.	0.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/10	4.	12.	12.	0.	24.	0.	20.	20.	20.	20.	0.	0.	0.	0.	20.	20.
10/11	1.	23.	23.	0.	24.	23.	4.	22.	22.	23.	0.	0.	0.	0.	23.	23.
10/12	6.	17.	17.	0.	24.	6.	14.	17.	16.	17.	0.	0.	0.	0.	17.	17.
10/13	0.	24.	24.	0.	24.	24.	23.	23.	23.	24.	0.	0.	0.	0.	24.	24.
10/14	0.	24.	24.	0.	24.	24.	24.	23.	16.	24.	0.	0.	0.	0.	24.	24.
10/15	1.	23.	23.	0.	24.	23.	23.	23.	23.	23.	0.	0.	0.	1.	23.	23.
10/16	0.	24.	24.	24.	0.	24.	24.	24.	24.	24.	0.	0.	8.	13.	24.	24.
10/17	0.	24.	24.	24.	0.	24.	24.	24.	24.	24.	0.	0.	1.	24.	24.	24.
10/18	17.	0.	0.	6.	0.	6.	6.	1.	1.	0.	1.	1.	0.	0.	6.	6.
10/19	0.	0.	0.	24.	0.	5.	24.	0.	0.	19.	0.	0.	0.	0.	24.	24.
10/20	0.	0.	0.	24.	24.	24.	24.	0.	0.	0.	0.	0.	0.	0.	24.	24.
10/21	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/22	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/23	0.	24.	24.	24.	0.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/24	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/25	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/26	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/27	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/28	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/29	0.	24.	24.	24.	0.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/30	0.	24.	24.	24.	0.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
10/31	0.	24.	24.	24.	24.	0.	24.	24.	24.	24.	0.	0.	0.	0.	24.	24.
CALIBRATION TIME		2.	2.	3.		0.	5.	5.	6.	1.	0.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 023

DATE	DIGITIZING SYSTEM	30-FT WS	30-FT WD	30-FT RH	30-FT TEMP	100-FT WS	100-FT WD	100-FT RH	100-FT TEMP	200-FT WS	200-FT WD	200-FT RH	200-FT TEMP	DT1	DT2
10/ 1	4.	20.	0.	0.	0.	0.	0.	0.	20.	20.	0.	0.	0.	0.	0.
10/ 2	3.	21.	0.	0.	0.	0.	0.	0.	14.	21.	0.	0.	0.	0.	0.
10/ 3	17.	7.	0.	0.	0.	0.	0.	0.	0.	7.	0.	0.	0.	0.	0.
10/ 4	13.	11.	0.	1.	0.	0.	0.	1.	1.	11.	0.	1.	1.	0.	1.
10/ 5	0.	24.	0.	0.	0.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.
10/ 6	14.	10.	0.	0.	0.	0.	0.	0.	0.	10.	0.	0.	0.	0.	0.
10/ 7	1.	23.	0.	0.	0.	0.	0.	0.	0.	23.	0.	0.	0.	0.	0.
10/ 8	1.	23.	0.	0.	0.	0.	0.	0.	0.	23.	0.	0.	1.	0.	0.
10/ 9	0.	24.	0.	1.	1.	0.	0.	1.	1.	24.	0.	0.	0.	0.	0.
10/10	4.	20.	0.	0.	0.	0.	0.	0.	1.	20.	0.	0.	1.	0.	0.
10/11	1.	23.	0.	0.	0.	0.	0.	0.	0.	23.	0.	0.	0.	0.	0.
10/12	6.	18.	0.	0.	0.	0.	0.	0.	0.	18.	0.	0.	0.	0.	0.
10/13	0.	24.	0.	0.	0.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.
10/14	0.	24.	0.	0.	2.	0.	0.	0.	1.	24.	0.	1.	1.	0.	0.
10/15	1.	23.	0.	0.	3.	0.	0.	1.	2.	23.	0.	1.	3.	0.	1.
10/16	0.	12.	5.	5.	10.	0.	0.	1.	8.	20.	2.	1.	9.	0.	0.
10/17	1.	0.	0.	0.	23.	0.	0.	0.	23.	17.	0.	0.	23.	0.	0.
10/18	1.	0.	0.	0.	17.	0.	0.	0.	17.	23.	0.	0.	17.	0.	0.
10/19	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.
10/20	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.
10/21	1.	0.	0.	0.	0.	0.	0.	0.	0.	23.	0.	0.	0.	0.	18.
10/22	1.	0.	0.	0.	2.	1.	1.	0.	3.	23.	0.	0.	1.	0.	23.
10/23	0.	0.	0.	1.	1.	0.	0.	1.	1.	13.	2.	2.	2.	0.	24.
10/24	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.
10/25	15.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/26	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/27	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/28	19.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/29	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/30	0.	9.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10/31	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CALIBRATION TIME		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR ATLANTIC RICHFIELD MONITORING PROJECT

TRAILER 024

DATE	COMPUTER	SO2	PART	H2S	WS	WD	RH	TEMP
10/ 1	24.	0.	24.	0.	0.	0.	0.	0.
10/ 2	24.	0.	24.	0.	0.	0.	0.	0.
10/ 3	24.	0.	24.	0.	0.	0.	0.	0.
10/ 4	24.	0.	24.	0.	0.	0.	0.	0.
10/ 5	24.	0.	24.	0.	0.	0.	0.	0.
10/ 6	24.	0.	24.	0.	0.	0.	0.	0.
10/ 7	24.	0.	24.	0.	0.	0.	0.	0.
10/ 8	24.	0.	24.	0.	0.	0.	0.	0.
10/ 9	24.	0.	24.	0.	0.	0.	0.	0.
10/10	24.	0.	24.	0.	0.	0.	0.	0.
10/11	24.	0.	24.	0.	0.	0.	0.	0.
10/12	24.	0.	24.	0.	0.	0.	0.	0.
10/13	24.	0.	24.	0.	0.	0.	0.	0.
10/14	24.	0.	24.	0.	0.	0.	0.	0.
10/15	24.	0.	24.	0.	0.	0.	0.	0.
10/16	24.	0.	24.	0.	0.	0.	0.	0.
10/17	18.	6.	24.	6.	6.	6.	0.	6.
10/18	0.	24.	24.	24.	24.	24.	0.	24.
10/19	0.	24.	24.	24.	24.	24.	0.	24.
10/20	0.	24.	24.	24.	24.	24.	0.	24.
10/21	4.	19.	24.	0.	19.	19.	0.	19.
10/22	17.	0.	24.	0.	7.	7.	0.	7.
10/23	0.	0.	24.	0.	24.	24.	0.	24.
10/24	8.	0.	24.	0.	16.	16.	0.	16.
10/25	24.	0.	24.	0.	0.	0.	0.	0.
10/26	24.	0.	24.	0.	0.	0.	0.	0.
10/27	24.	0.	24.	0.	0.	0.	0.	0.
10/28	24.	0.	24.	0.	0.	0.	0.	0.
10/29	14.	10.	24.	0.	10.	10.	0.	10.
10/30	0.	8.	24.	0.	24.	24.	0.	24.
10/31	0.	15.	0.	0.	24.	24.	0.	24.
CALIBRATION TIME		0.		1.	0.	0.	0.	0.

V. METEOROLOGICAL SUMMARY

A. Summary of the Major Features of the Upper Flow Over North America

North America during October alternated between periods of zonal and meridional flow, with two sequences of split upper level flow. The upper flow was basically zonal (or west-east) over the United States on October 1, 4, 7, 12, 13, 22, 23, and 24. The flow was generally meridional (north-south) on October 2-3, 5-6, 9, 14-21, and 25-26. Split upper level flow prevailed on October 8, 10-11, and 27-31. The net results of these circulation patterns for the month of October were: much below normal temperatures and below normal precipitation over the northeastern United States; below normal temperatures and much below normal precipitation over the Atlantic seaboard states; near normal temperatures and precipitation over the Central United States; below normal temperatures and slightly below normal precipitation in the South; much below normal temperatures and below normal precipitation in the north central United States; below normal temperatures and above normal precipitation in the Southwestern United States; slightly above normal temperatures and near normal precipitation in the Rocky Mountain regions; and generally above normal temperatures and below normal precipitation in the West.

October began with a mean long wave ridge axis extending from western Canada to northern California. A rather deep long wave trough was positioned through the eastern United States. Precipitation was confined to the far northeastern portion of the United States. A stationary cold front extended from Montana through Wyoming to southern Nebraska. By October 2nd, the long wave pattern had amplified so that a well defined long wave trough extended from the Great Lakes to Florida. A strong upper ridge extended from Utah to north central Canada and a deepening upper trough was approaching the Pacific coast. A weak upper low was off the California coast. On the surface, a large, cold high pressure system was centered over Illinois. A warm front extended southward along the Rocky Mountains from Canada, while a strong maritime polar cold front came inland along the Washington coast. Precipitation was confined to California, Washington, and the northeastern United States.

On October 3rd, all of the major features of the circulation over North America moved eastward. The long wave trough along the Atlantic seaboard moved eastward slightly and amplified. The upper ridge also moved eastward to a position from Kansas to Minnesota and then northward into Canada. The upper trough in western North America also moved eastward and flattened somewhat. On the surface, the large surface high was still centered near the Great Lakes region, while a cold front advanced across the Great Basin. Precipitation was widespread across the Intermountain Region.

By October 4th, the cold front had pushed completely through Colorado into the Midwest. The large surface high moved southeastward to a position along the Atlantic seaboard. At upper levels, strong short waves were located off the coast of the eastern United States, along the Rocky Mountains, and along the west coast. Precipitation, mostly light, was scattered throughout the western two-thirds of the United States. On October 5th, the general positioning of circulation systems remained about the same. The long wave in the western United States amplified slightly. Precipitation was moderate from the Great Lakes to Montana and south from there to Kansas.

On October 6th, the northern half of the long wave which had been over the western United States was reinforced and moved eastward, thus causing the southern half of this wave to be sheared off, forming a cutoff low aloft over California. The cold front which had been across the Midwest was reinforced by the deepening of the northern half of the short wave and moved southward as a result. Cloudiness and precipitation were widespread in a band from Arizona and New Mexico to Minnesota and the Great Lakes on the 6th, but decreased throughout western Colorado.

By October 7th, the western two-thirds of the nation was under the influence of a large dome of high pressure. The short wave that had been over the Midwest on the 6th moved eastward rapidly, to a position over the Great Lakes. The cold front associated with this short wave extended southwestward from Maine through Tennessee to central Texas. The low aloft over California persisted, causing precipitation over southern California and Nevada. Precipitation also extended along the front from Texas to New York. Skies were clear to partly cloudy over western Colorado. The upper flow pattern was split in the western United States on October 8th, as the upper low persisted. The cold front and short wave in the eastern United States continued to push eastward to a position off the coast. Most of the nation was under the influence of a large, weak high pressure system. Precipitation was confined to California and Nevada.

By October 9th, a short wave approaching the western coast of the United States caused the upper low to be ejected northeastward to a position over Nevada. A weak cold front extended from the Great Lakes to Nebraska but no other significant weather systems affected the United States. Temperatures were cool in the Northeast but seasonable elsewhere. A weak surface high pressure area affected most of the United States, resulting in many areas of light winds and stagnation. Precipitation in the United States was confined to the Great Basin area. October 10th saw a split upper level flow regime return to the western United States. A short wave trough was located from Idaho to southern California. Showers and a few thundershowers were scattered throughout the Intermountain Region and the western slopes of the Rockies. A few showers fell in the Tract C-b area.

The split flow regime continued in the western United States on October 11th. The short wave from Idaho to California stayed nearly stationary. A cold front extended southwestward from a low pressure system on the Minnesota-Canada border through Nebraska to northern New Mexico. A secondary cold front extended westward to Montana, also from this low. Precipitation was widespread throughout the western half of the nation on the 11th, with showers and thundershowers again dotting western Colorado. By October 12th, the two cold fronts through the northern Plains States had organized into one strong frontal system which extended from the Great Lakes southwestward to the Texas Panhandle. The short wave trough which had been stationary over the western United States for the two previous days finally formed a weak low pressure circulation aloft over western Arizona. Precipitation covered a large portion of the United States extending from Arizona northeastward in a broad band to the Great Lakes region. A large cold high pressure system dominated the weather in the western half of the United States behind the cold front. Considerable cloudiness and a few showers persisted in western portions of Colorado.

By October 13th, another in a series of upper level short waves moving rapidly into the northwestern United States from British Columbia caused the upper low center over the southwestern United States to move slowly eastward. This approaching short wave had associated with it a moderate polar maritime cold front, which was located across central North Dakota and Montana on the morning of the 13th. Precipitation was widespread across the middle of the United States on the 13th, extending from New Mexico to the Great Lakes in a very broad, nearly solid band. Skies cleared over western Colorado on the 13th as the upper low was forced eastward.

The short wave amplified rapidly on the 14th, causing the cold front to move southward rapidly. The front passed through western Colorado during the morning of the 14th, causing cooler temperatures and a continuance of clear skies. Precipitation once again occurred in a broad band across the central part of the United States because of the strong short wave and cold front. The short wave and cold front continued to move eastward rapidly on October 15th, thus forcing the precipitation area eastward with it. A large upper ridge and surface high covered the western half of the United States on the 15th, thus causing a continuance of fair, dry conditions in western Colorado on this day.

October 16th and 17th were very similar with regard to the upper flow patterns which prevailed over North America on these two days. A large surface high pressure cell dominated most of the United States during the period. Precipitation was confined to the eastern fourth of the country. A large upper ridge prevailed over California, Nevada, Utah, Idaho, Wyoming, and Colorado on these two days, while a large amplitude upper trough extended from the Great Lakes region to the Gulf of Mexico. Fair and mild weather prevailed over western Colorado on these days.

The same basic meridional flow pattern persisted over the United States on October 18th and 19th. A strong upper ridge dominated the flow in the western United States on both days, with a deep upper trough along the Atlantic seaboard. The systems progressed eastward very slowly, so that another long wave trough began to approach the Pacific northwest by October 19th. Precipitation was minimal across the United States on both the 18th and 19th. A weak cold front progressed southward through the eastern half of the nation on the 18th and 19th, but did not affect Colorado at all. Meteorological conditions remained fair and unseasonably warm throughout western Colorado on both of these days.

The upper flow began to change on October 20th. The upper ridge and trough progressed eastward slowly, but a strong short wave began to dig southward along the west coast of the United States. A cold front associated with the short wave extended southward from eastern Washington into northwestern Nevada and northern California. Precipitation was confined to the northwestern and northeastern portions of the United States. Fair and warm conditions continued in western Colorado.

The short wave in the Northwest continued its easterly movement on October 21st, forming a closed upper low circulation in the process. The polar maritime cold front continued its eastward movement, passing through western Colorado during the afternoon of the 21st. Because of the upper low and its associated moisture and positive vorticity advection, cloudiness and scattered rainfall returned to western Colorado on this day. Actually, precipitation was scattered throughout the entire length of the Rockies. Precipitation and considerable cloudiness continued in western Colorado on October 22nd as the upper low strengthened slightly and remained stationary over northern Nevada and northern Utah. The upper flow became fairly zonal on this day, with the jet stream located along the United States-Canada border. The polar maritime cold front moved eastward through the northern Plains States but did not advance southward because of the zonal nature of the upper flow, the northern position of the jet stream, and a blocking high pressure cell in the southeastern United States. Precipitation was widespread throughout the southwestern United States on this day.

The upper level flow over northern Nevada strengthened further by the morning of October 23rd, causing the broad area of precipitation to persist over the Plateau region and southwestern United States. Temperatures were cooler and cloudiness and precipitation were widespread throughout western Colorado on this day. The zonal character of the upper level flow and the northward retreat of the polar front jet stream into Canada caused the maritime polar cold front through the central part of the United States to become stationary. Precipitation was scattered along this front from Texas to New York. Rains continued in western Colorado during the morning of the 24th but began to diminish in areal coverage later in the day as the upper low over northern Nevada began to fill gradually. A short wave moving south from Canada into the northern Great Plains brought with it a weak cold front which extended into northern Wyoming during the morning. Precipitation was heavy in Texas and Oklahoma on this day. Clearing took place in western Colorado during the night of the 24th as the cold front passed through the region and a high pressure ridge built southward into the area.

The upper flow once again had meridional characteristics by October 25th, although the flow was beginning to show splitting tendencies once again in the western United States. An upper ridge extended northward from Colorado through Montana and into Alberta, Canada. A long wave trough extended southeastward from Hudson's Bay into New England and a short wave and upper closed low came onshore in the Pacific northwest. Precipitation occurred in Washington and Oregon and through the center of the nation, along a cold front which extended from Texas to the Great Lakes. Mild temperatures and clear skies prevailed in western Colorado.

Cloudiness returned to western Colorado as the short wave moved eastward from the Pacific coast on the 26th. Precipitation was restricted to the Pacific Northwest, the Southwest, and the Midwest as an upper ridge which extended from Florida to Alberta, Canada brought fair weather to most of the nation. The upper flow became split in the southwestern United States on the 27th, as a cold pool of air at upper levels became cutoff from the longwave circulation and formed a closed low over western Arizona. This low caused scattered light precipitation throughout the Southwest on this day. Cloudiness increased throughout western Colorado as the day progressed and light precipitation was experienced in the area during the evening hours.

An approaching short wave from the Pacific caused this upper low to be ejected northeastward by October 28th, resulting in continued cloudiness and scattered precipitation in western Colorado. This approaching short wave caused the generation of a strong surface low pressure area (cyclogenesis) in Oregon, from which trailed a polar maritime cold front into California. The split flow characteristics and broad upper level troughing which prevailed in the western two-thirds of the United States caused this entire region of the nation to be covered by cloudiness and precipitation.

The split flow in the polar front jet stream continued on October 29th, with a strong upper low forming over Nevada. A strong surface low was centered over western Utah during the morning of the 29th, with a moderately strong maritime polar cold front trailing southward. Cloudiness and precipitation continued in western Colorado, as the storm produced the first widespread snow of the season in the Intermountain Region. These cloudy and snowy conditions persisted in western Colorado on October 30th, as the upper low intensified and moved northeastward to a position over central Utah. The surface low had meanwhile moved to eastern Colorado and weakened somewhat. Cold frontal passage occurred late on the 29th in western Colorado. By the morning of the 30th, it was located on a line from eastern Colorado southward to western Texas. Much of the nation received precipitation on this day due to the amplitude of the upper level troughing over the western United States.

Cloudiness and snows continued in western Colorado on October 31st as the intensifying upper low was pushed northeastward by an approaching short wave just off the northwestern coast of the United States. On the morning of the 31st, this upper low was located over central Wyoming. The split in the upper flow over the western United States continued, however, with a broad upper trough continuing to affect the western two-thirds of the United States. A surface low was located in Wyoming by the morning of the 31st, while a maritime polar cold front extended from Idaho into central California. Precipitation was widespread throughout the western and central portions of the nation.

B. Summary of Meteorological Conditions in the Tract C-b Region

Precipitation totals and temperatures were near normal in the Tract C-b region of western Colorado during the month of October. The area experienced seven cold frontal passages during the month (October 3, 5, 10, 14, 21, 24, and 29). The strongest of these fronts was the one which passed through the region on October 29th. Precipitation was experienced in the area on twelve days of October (October 3, 5, 10, 11, 22, 23, 24, 27, 28, 29, 30, 31), but most of the daily totals were low. Snow was experienced in the area of the Tract C-b on October 29th, 30th, and 31st, but snow amounts were rather light and melting occurred within a few days. Temperatures were below normal during the periods from October 3rd through the 7th and October 11th through the 15th. Temperatures were much below normal on October 29th, 30th, and 31st. Temperatures were above normal on the other days of the month, but were much above normal during the period from October 17th through the 22nd.

The area received 62 percent of the possible sunshine during the month. Sky coverage by cloudiness in the general area totalled 5.3 out of a possible 10 during the period from sunrise to sunset during October, and 4.9 out of a possible 10 for all possible observations during the month. The region experienced 10 clear days, 9 partly cloudy days, and 12 cloudy days during October. Thunderstorms were in the area on two October days (October 10th and 11th). Grand Junction, Colorado, about 75 miles to the southwest of the Tract C-b, received .72 inch of precipitation during October, which is .21 inch below normal for the month.

Poor dispersion or air stagnation conditions occurred occasionally in western Colorado during October. The period during which dispersion conditions were worst in the Tract C-b region was from October 17th through the 20th. During this interval, the region was influenced by a large persistent upper ridge over the western portions of the United States. This ridge brought clear skies to the Tract C-b area but also brought rather low mixing heights and subsidence aloft. The weak surface anticyclone associated with this upper ridge further compounded the problem by causing very light surface winds throughout the area. The net result was an extended (3 or 4 days) period of locally poor dispersion conditions.

The following is a summary of all air stagnation messages from the National Weather Service pertaining to western Colorado during the month of October. The messages were received in Radian's facilities via the Service "C" Weather Teletype Circuit from the National Weather Service, a cable service to which Radian subscribes. These Air Stagnation Narratives are coded as "FKUS" messages.

- October 2nd: "In the western United States, the ridge moving through the Intermountain Regions of the Rockies is supporting the development of stagnation in portions of Colorado, Arizona, New Mexico, and West Texas...The stagnation will diminish as the ridge moves eastward."
- October 9th: "The stagnation through the Rockies this morning will diminish during the day as the trough moves into the Intermountain Region."
- October 16th: "Deteriorating local dispersion conditions over much of the United States west of the Rockies during the next 24 hours."
- October 17th: "Stagnation conditions are persisting over the western and southwestern United States as a result of little movement of the upper ridge over the Pacific Northwest and no movement of the flat surface high pressure area."

- October 19th: "Large-scale stagnation exists over the western United States from extreme West Texas through New Mexico to western Montana. An ASA (Air Stagnation Advisory) is in affect for much of this area."

C. Meteorological Discussion of Tract C-b and the Piceance Creek Valley

Meteorological conditions often varied considerably from the Piceance Creek Valley to the Tract C-b itself during the month of October. Anabatic and katabatic circulations were much better organized in the valley at Trailers 020, 021, and 022 than on the plateau at Trailers 023 and 024. Nighttime temperatures were much colder in the valley than on the plateau during nights when radiational cooling occurred and the downslope flow became organized. The diurnal range of temperatures was much greater at the Valley Trailers (020, 021, and 022) because of the mountain and valley circulations, with daily temperature ranges of 35° common at these trailers during October.

Trailer 021 generally had the largest diurnal range of temperature, mostly because of its location. At this location, the katabatic winds were fairly light at night because of the widening of the valley just upstream to the southeast. As a result, the mixing of the air was diminished during the night and cold air from higher elevations was allowed to collect in this relatively low area of the valley. Thus, radiational cooling was allowed to proceed uninhibited and temperatures fell rapidly during the night. Nighttime minimum temperatures were generally at least 5°F colder at this trailer than at the other two trailers in the valley and at least 10°F colder than minimum temperatures at Trailer 023 on the plateau, where the katabatic circulation cell was not developed so as to abet rapid cooling.

On the majority of the nights in October, Trailer 021 had the lowest minimum temperatures, followed by 020, 022, and 023. Temperatures were higher at Trailers 020 and 022 during the night because of increased wind speeds from the katabatic circulation, which mixed the air near the surface to the extent that the ground-based radiation inversions that formed near these trailers were not so intense as the inversion (coldest at the lowest level) at Trailer 021. During the afternoons, temperatures were much more uniform at all trailers because of increased vertical mixing from convection and the anabatic (upslope) flow. Daytime maximum temperatures during October were generally highest at Trailer 023, followed closely by Trailers 022, 021, and 020, in that order.

Relative humidities were generally rather uniform in the Piceance Creek Valley during the month, averaging about 62 percent. Humidities were a little lower on the plateau (because of slightly drier air and higher average temperatures), averaging about 53 percent at the 30-foot level of the meteorological tower.

Winds were generally much lower in the valley than on the plateau during the month. Winds generated by pressure gradient forces were normally decreased in strength substantially from the plateau to the valley. While the strongest winds during the month were generally the result of synoptic-scale developments on the plateau at the meteorological tower, the strongest winds in the valley were often the result of katabatic or anabatic circulations.

Winds at Trailers 020, 021, and 022 exhibited marked channelling effects because of the steep valley walls in the vicinity. Winds at Trailer 022 were normally either east-southeast or west-northwest while winds at Trailers 021 and 020 were normally either northwesterly or southeasterly because of the katabatic-anabatic circulation cycle. However, during transition periods between upslope and downslope flow, or vice versa, the wind direction was rather variable at these locations. In addition, on occasions when the surface pressure gradient was weak and an anabatic or katabatic circulation cell was not developed, the winds were often calm or variable in direction.

At Trailer 023, winds did not exhibit as much of a terrain or micrometeorological dependence. Pressure gradient forces for the most part controlled the wind directions and speeds at the meteorological tower. Both the mode and mean of the distribution of wind directions at the tower were south-southwesterly or southwesterly, depending on the level of the tower under consideration, which is a reflection of the pressure gradient forces which existed in the Tract C-b region during October. Winds generally veered in direction (clockwise progression) and increased in speed with increasing height at the meteorological tower.

Average temperatures in the monitoring network for the month of October ranged from 39.4°F at Trailer 021 in the valley to 47.3°F at the 30-foot level of the meteorological tower at Trailer 023. The average temperature at Trailer 020 was 41.3°F, two degrees higher than at Trailer 021. At the meteorological tower, average temperatures were fairly uniform, ranging from 45.7°F at the 8-foot level to 47.3°F at the 30-foot level, with the 100-foot and 200-foot levels registering intermediate values. However, the average temperatures do not reflect the diurnal variation of vertical temperature structure which occurred at the tower. During cloudy, wet days, near-isothermal conditions prevailed at the four tower levels. However, on clear or partly cloudy days, the normal thermal pattern was: (1) inversion to 100 feet, with unstable lapse rates above that during the night, and (2) unstable lapse rates to 100 feet with an inversion above that during the day. The layer above 100 feet seems to have been decoupled from the layer below that level much of the time. However, during extremely windy or cloudy conditions, there was more uniformity in the vertical temperature structure.

The highest daily average humidity reading in the valley during October was 93.9 percent at Trailer 022 on October 29th. October 5th also had average relative humidities above 80 percent. Likewise, on the plateau, October 5th and 29th had the highest average relative humidities. October 1st and 2nd were the driest days of the month, both in the valley and on the plateau, with daily average humidities in the twenties.

The highest daily average temperature in the region for October occurred on October 1st. The average temperature this day at the 30-foot level of the meteorological tower was 61.0°F. Meanwhile, in the valley, the average temperatures ranged from 46.0°F to 48.1°F. The much lower average temperatures in the valley were due to much lower temperatures from strong radiational cooling during the night. The lowest daily average temperatures in the network during October were recorded on October 30th, a snowy day, when temperatures ranged from 27.6°F to 29.9°F in the valley and from 29.8°F to 31.0°F at the four meteorological tower levels. The highest maximum temperature recorded in the valley during October was 73°F at Trailers 020 and 021 on October 2nd. The highest temperatures recorded at the meteorological tower during the month occurred on October 1st, 2nd, and 15th. The lowest temperature recorded in the valley during October was 14°F at Trailer 021 on October 15th. The lowest temperature recorded on the plateau was 24°F on October 30th.

Considering the valley stations, winds were strongest at Trailer 022 during the month, averaging 5 miles per hour. Winds at Trailer 021 averaged 3 miles per hour and winds at Trailer 020 averaged 2 miles per hour. The highest daily average winds occurred on October 3rd and 21st. On a diurnal basis, the strongest winds occurred from 1300 to 1500 hours at Trailer 020, from 1500 to 1800 hours at Trailer 021, and from 0100 hours to 0200 hours (katabatic winds) at Trailer 022.

At the meteorological tower, wind speeds averaged 2 miles per hour for the month at the 8-foot level, 7 miles per hour at the 30-foot level, 6 miles per hour at the 100-foot level, and 9 miles per hour at the 200-foot level. The windiest days of the month on the plateau were October 21st and 31st. On a diurnal basis, winds were strongest on the plateau during the period from 1300 to 1500 hours. Winds were lightest from 0800 to 0900 hours. The highest 5-minute average wind speed recorded in the valley during October was 23 miles per hour at Trailer 021 on October 3rd. The highest 5-minute average wind speed recorded at the meteorological tower site during October was 35 miles per hour, at the 100-foot level, on October 21st.

VI. DATA PRESENTATION AND SUMMARY

This section includes summaries for various recorded data at the monitoring sites. The data presentations indicate the variability of pollutant concentrations and meteorological parameters with location and time. In addition, the presentations indicate the functional dependence of pollutant concentration with wind direction. All data except suspended particulates (24-hour samples) are sampled once each second, but recorded as five-minute arithmetic averages of the one-second samples. This averaging technique tends to smooth instantaneous maximum values, and is especially evident when comparing wind gusts to local weather bureau data.

Inherent to any data acquisition system is random noise both from the recording instruments and quantization in the analog-to-digital conversion. The lower threshold for all analytical instruments is twice the maximum noise level generated by the instruments. This lower threshold is 5 ppb for all instruments, except for the ozone analyzer for which it is 0.5 ppb. Therefore, any values appearing in the data presentations that are less than 5 ppb indicate only a trace of pollutant in question and should not be construed to be absolute levels. In addition, when concentration levels drop below the lower threshold, the recorded quantity is simply random noise and averages tend toward zero. Thus, when concentrations are below the lower threshold of the analytical instruments they may appear as a zero entry in the data presentation which does not indicate absolute zero concentration.

All pollutant data (except for particulate data is taken at the monitoring site in integer parts per billion (ppb) but is presented here in micrograms per cubic meter ($\mu g/m^3$)

assuming standard temperature and pressure of 25°C and 760 mmHg (1013.2 millibars), respectively. The scale factors required to convert μg/m³ at standard conditions back to ppb for the various pollutants are given in the following table.

POLLUTANT	TO CONVERT μg/m³ AT 25°C AND 760 mmHg TO ppb MULTIPLY BY
NO_x	.534
NO	.534
NO_2	.534
SO_2	.384
H_2S	.723
THC	1.536
CH_4	1.536
CO	.877
O_3	.512

The units of the meteorological parameters are given in the table. It should be noted here that inside temperature is monitored and recorded as a functional part of the system but is not presented in this report.

Table III displays the monthly statistics for each monitoring station for the month. To insure statistical significance, and to reduce the possibility of introducing a bias in the presentation, averages are computed only when at least 50 percent of the samples are present, except for relative humidity and temperature, in which case 75 percent of the samples are required. If less than the required samples are present for a particular parameter, that entry will be blank. The number of samples present for a particular channel is defined as the total possible number of five-minute samples for the averaging time less the computer downtime less the channel downtime less the channel calibration time. The averages in Table III are arithmetic averages with the following exceptions:

- Wind speed and wind direction are computed using a vector averaging technique where the wind speed is treated as the vector magnitude.
- Particulate averages are computed as the geometric mean.

Table IV displays the daily averages. Again, 50 percent of the five-minute samples are required in order to compute an average except for the cases of relative humidity and temperature which require 75 percent. A blank entry indicates an insufficient number of five-minute samples present for that day. Wind speed, wind direction, and particulate averages are computed the same way as described in Table III.

Table V presents the maximum daily five-minute average retained in the data base as well as the time of occurrence. A five-minute maximum average is printed if any samples are present for that day. Therefore, the maximum five-minute average for a channel which experienced considerable downtime or calibration time during the day in question may be misrepresentative of the maximum expected for that channel on that day.

Table VI indicates the five largest averages for various averaging times. The table shows the period of time covered by the average. Maxima are chosen so that time segments are independent. The maximum averages reported are found using a 'sliding average' technique with the exception of the 24-hour particulate average which is computed from midnight to midnight and the 3-hour hydrocarbon average which is computed from 6:00 to 9:00 a.m. only. For averaging times less than or equal to three hours, the sliding average is stepped one five-minute sample at a time. For longer averaging times the step size is twelve samples or one hour. For averaging times less than or equal to one hour 100 percent of the five-minute samples must be present to compute an average. Averaging times greater than one hour require 90 percent. Whether or not a sliding average is computed is solely determined by the number of samples present in that averaging time and is independent of daily and monthly averaging criteria.

To demonstrate the functional dependence of recorded parameters upon wind direction, Table VII shows pollutant concentration displayed in a bi-variate distribution with wind direction. The tables display the total number of five-minute samples occurring in each concentration and wind speed class. The mean concentration for all samples occurring in each wind class are also shown. This distribution demonstrates the dependence of high pollutant concentrations upon wind direction. Appendix A contains stability-wind rose diagrams.

The wind speed classifications used in Appendix A are based on the Beaufort wind scale classification system. This is a system of estimating and reporting wind speeds, invented in the early nineteenth century by Admiral Beaufort of the British Navy. It was originally based on the effects of various wind speeds on the amount of canvas that a full-rigged frigate of the period could carry, but has since been modified and modernized. In its present form for international meteorological use it equates: (a) Beaufort force (or Beaufort number); (b) wind speed;

(c) descriptive term; and (d) visible effects upon land objects or the sea surface. One land adaptation is the NRM wind scale.

The six basic wind speed classifications used in the report are: 1-3 knots, 4-6 knots, 7-10 knots, 11-16 knots, 17-21 knots, and winds of greater than 21 knots. The following table is a complete description of the Beaufort Wind Scale, taken from Physical Climatology, by Helmut Landsberg, 1969.

BEAUFORT WIND SCALE FOR OBSERVATIONS AT LAND STATIONS

Force	Explanatory Title	Specification for Use	Corresponding Limits of Wind Speed at 10 meters ab. grd.				
			Mi/hr.	Knots	Km/hr.	M/sec.	Ft/sec.
0	Calm	Smoke rises vertically	<1	<1	<1	0.3	1
1	Light air	Direction of wind shown by smoke drift, but not by wind vanes	1-3	1-3	1-5	0.3-1.5	1-5
2	Light breeze	Wind felt on face; leaves rustle; ordinary vane moved by wind	4-7	4-6	6-11	1.6-3.3	6-11
3	Gentle breeze	Leaves and small twigs in constant motion; wind extends light flag	8-12	7-10	12-19	3.4-5.4	12-18
4	Moderate breeze	Raises dust and loose paper; small branches are moved	13-18	11-16	20-28	5.5-7.9	19-26
5	Fresh breeze	Small trees in leaf begin to sway; wavelets formed on inland waters	19-24	17-21	29-38	8.0-10.7	27-35
6	Strong breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty	25-31	22-27	39-49	10.8-13.8	36-45
7	High wind	Whole trees in motion; inconvenience felt when walking against wind	32-38	28-33	50-61	13.9-17.1	46-56
8	Fresh gale	Breaks twigs off trees; generally impedes progress	39-46	34-40	62-74	17.2-20.7	57-68
9	Strong gale	Slight structural damage occurs (chimney pots and slates removed)	47-54	41-47	75-88	20.8-24.4	69-80
10	Whole gale	Seldom experienced inland; trees uprooted; considerable structural damage occurs	55-63	48-55	89-102	24.5-28.4	81-93
11	Storm	Very rarely experienced; accompanied by widespread damage	64-72	56-63	103-117	28.5-32.6	94-105
12	Hurricane		73-82	64-71	118-133	32.7-36.9	107-121
13			83-92	72-80	134-149	37.0-41.4	122-135
14			93-102	81-89	150-166	41.5-46.1	137-151
15			104-114	90-99	167-183	46.2-50.9	152-166
16			115-125	100-108	184-201	51.0-56.0	167-183
17			126-136	109-118	202-220	56.1-61.2	184-201

Source: Table 36 (p. 119) in R. J. List (1951); Smithsonian Meteorological Tables; Smithsonian Miscell. Coll. Vol. 114.

Table VIII demonstrates the diurnal variation of various recorded parameters. Hourly averages are determined by arithmetically averaging five-minute samples, except for wind direction averages, which are computed vectorially assuming unit vector magnitudes. Totals in the diurnal wind direction tables are vector averages of the columns and rows. For all parameters, a blank entry in the diurnal variation table indicates that less than half (i.e., less than 6) of the five-minute samples for that hour are present.

Times given in the data presentation are Mountain Daylight Saving Time (MDT) until towards the end of the month when the computer clocks were manually reset to Mountain Standard Time (MST). When the computer clocks were set back one hour, one hour's worth of data was overwritten.

To facilitate comparison of recorded concentrations to ambient air quality standards, the following regulations are presented.

FEDERAL AND COLORADO STANDARDS

	Primary	Secondary	Non-Designated Area	Designated Area		
				1973	1976	1980
Particulate						
Annual G. M.	75 μg/m³	69 μg/m³	45 μg/m³	70 μg/m³	55 μg/m³	45 μg/m³
24 Hr. Max.*	260	150	150	200	180	150
Sulfur Oxides						
Annual	80(.03ppm)		--	60(.02ppm)	25(.009ppm)	10(.004ppm)
24 Hr. Max.*	365(.14ppm)		15(.005ppm)	300(.1ppm)	150(.05ppm)	55(.02ppm)
3 Hr. Max.*	--	1300(.5ppm)	--	--	--	--
1 Hr. Max.**	--	--	--	800(.28ppm)	300(.1ppm)	--
Oxidant						
1 Hr. Max.*	160(.08ppm)	160				
8 Hr. Max.*	--	--				
Annual	--	--				
Hydrocarbons						
3 Hr. Max.* 6-9 a.m.	160(.24ppm)	160				
Carbon Monoxide						
Max. 8 Hrs.*	10000(9ppm)	10000				
Max. 1 Hr.*	40000(35ppm)	40000				
Nitrogen Dioxide						
Annual	100(.05ppm)	100				

Units are micrograms per cubic meter and ppm in parenthesis.

*Not to be exceeded more than once per year.

**Not to be exceeded more than once per month.

```
                          TABLE III. AVERAGES FOR OCT   1 THRU 31
             (UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
                     TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

           NITROGEN OXIDES(NOX)                    NITRIC OXIDE(NO)                  NITROGEN DIOXIDE(NO2)

 SITE   020      023                          020      023                         020      023
         9.3                                   2.3                                  7.1
-------------------------------------------------------------------------------------------------------

           TOTAL HYDROCARBONS                            METHANE                  NON-METHANE HYDROCARBONS

 SITE   020      023                          020      023                         020      023

-------------------------------------------------------------------------------------------------------

            CARBON MONOXIDE                               OZONE                      BAROMETRIC PRESSURE

 SITE   020      023                          020      023                         020      023
                                              42.7
-------------------------------------------------------------------------------------------------------

           SULFUR DIOXIDE(SO2)                                                   PARTICULATE

 SITE   020      021      022      023      024                          020      021      022      023      024
         1.2      2.1               3.4
-------------------------------------------------------------------------------------------------------

            HYDROGEN SULFIDE                                              TOTAL PRECIPITATION
                                                                                (INCHES)
 SITE   020      021      022      023      024                          020      021      022      023      024
         0.0      1.0               1.2
-------------------------------------------------------------------------------------------------------

            RELATIVE HUMIDITY                                               TEMPERATURE OUTSIDE

 SITE   020      021      022      024                                   020      021      022      024
        61.9     62.0                                                    41.3     39.4
-------------------------------------------------------------------------------------------------------

               WIND SPEED                                                  WIND DIRECTION

 SITE   020      021      022      024                                   020      021      022      024
         0.7      1.1                                                   147.5    144.3
-------------------------------------------------------------------------------------------------------
```

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                         TABLE III. AVERAGES FOR OCT    1 THRU 31
        (UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
                TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)


                                                WIND SPEED
              (8-FT)                (30-FT)                (100-FT)                (200-FT)
   SITE        023                   023                     023                     023
                1.4                                          2.8
------------------------------------------------------------------------------------------------

                                              WIND DIRECTION
              (8-FT)                (30-FT)                (100-FT)                (200-FT)
   SITE        023                   023                     023                     023
              210.7                                        191.7
------------------------------------------------------------------------------------------------

                                             RELATIVE HUMIDITY
              (8-FT)                (30-FT)                (100-FT)                (200-FT)
   SITE        023                   023                     023                     023
               53.4                  52.9                    50.2                    58.7
------------------------------------------------------------------------------------------------

                                            TEMPERATURE OUTSIDE
              (8-FT)                (30-FT)                (100-FT)                (200-FT)
   SITE        023                   023                     023                     023
               45.7                  47.3                    46.8                    47.2
------------------------------------------------------------------------------------------------
```

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE DATE	020	023	020	023	020	023
10/ 1	10.9	43.7	0.5	37.3	10.4	6.4
10/ 2	9.6	16.1	0.6	15.8	9.0	0.3
10/ 3	11.6		9.4		2.2	
10/ 4	38.0		6.6		31.5	
10/ 5						
10/ 6	17.3		14.5		2.9	
10/ 7	4.5	4.7	2.0	2.5	2.5	2.2
10/ 8	5.3		0.9		4.4	
10/ 9	8.9		0.7		8.2	
10/10	15.9		0.5		15.4	
10/11	17.5		1.0		16.5	
10/12	18.2		2.1		16.1	
10/13	18.3		2.4		15.9	
10/14	17.4		1.9		15.5	
10/15	13.5		0.5		12.9	
10/16	7.1		0.0		7.1	
10/17	7.1		0.0		7.1	
10/18	3.5		0.0		3.5	
10/19	11.7	7.1	11.0	2.6	0.7	4.5
10/20	5.1	6.8	2.0	2.0	3.1	4.8
10/21	2.4	7.3	1.8	2.9	0.5	4.4
10/22		7.1		3.7		3.4
10/23	0.0	8.0	0.0	0.8	0.0	7.2
10/24	0.0	2.1	0.0	0.0	0.0	2.1
10/25	0.0		0.0		0.0	
10/26	0.0	0.0	0.0	0.0	0.0	0.0
10/27	0.0	0.0	0.0	0.0	0.0	0.0
10/28	2.7		0.3		2.4	
10/29	7.8	12.4	2.4	0.0	5.4	0.0
10/30	2.6	0.0	0.5	0.0	2.1	0.0
10/31	3.6	0.0	1.4	0.0	2.2	0.0

TABLE IV, DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	SULFUR DIOXIDE(SO2)					PARTICULATE				
SITE DATE	020	021	022	023	024	020	021	022	023	024
10/ 1	0.0	0.0	3.0	4.4						
10/ 2	0.0	0.0	0.8	8.6						
10/ 3	0.1	0.1	0.0							
10/ 4		0.0	0.0							
10/ 5		0.0		10.0						
10/ 6		0.4								
10/ 7	18.9	16.5		8.2						
10/ 8	5.8	0.0		0.0						
10/ 9	7.5	0.1		0.0						
10/10	0.0	0.0		0.0		5.0				
10/11	0.0	0.0		15.0			5.0			
10/12	0.0	0.0		4.2						
10/13	0.0	0.0		2.2						
10/14	0.0	0.0		0.9						
10/15	0.9	0.2		15.3		10.0	11.0			
10/16	0.0	0.0					15.0		11.0	
10/17	0.0	1.9				9.0			16.0	
10/18	1.2						20.0		21.0	
10/19	0.0	0.0				13.0	20.0		36.0	
10/20	0.0	3.2				17.0	18.0			
10/21	0.5	1.5		0.0						
10/22	0.0	0.1		0.0						
10/23	0.0	1.4		0.0	12.3	3.0	3.0		7.0	
10/24	0.0	0.0		0.0	9.3		5.0			
10/25	0.0	0.1				2.0				
10/26	0.0	0.0		0.0		14.0				
10/27	0.0	0.4		0.1						
10/28	0.1						13.0			
10/29	0.0	25.5		0.0		2.0	3.0		1.0	
10/30	0.0	0.2		0.0	0.2		4.0		3.0	
10/31	0.0	9.6		0.0			2.0	2.0		1.0

TABLE IV, DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE DATE	020	023	020	023	020	023
10/ 1		18565.5		13873.3		4692.2
10/ 2		17103.7		13182.6		3921.1
10/ 3						
10/ 4						
10/ 5						
10/ 6						
10/ 7				5044.3		
10/ 8						
10/ 9						
10/10						
10/11		7249.6				
10/12						
10/13						
10/14						
10/15						
10/16	820.5					
10/17	828.1					
10/18	812.6					
10/19				842.4		
10/20				797.3		
10/21						
10/22	840.8			939.3		
10/23	812.0					
10/24	873.5		819.3	776.4	60.5	
10/25	896.4					
10/26		11502.8		821.5		10681.3
10/27		15821.1		795.1		15026.1
10/28						
10/29	873.8	10065.8	793.1	857.5	80.7	9208.3
10/30	854.6	8842.2		823.2		8018.9
10/31	821.4	8912.8		850.1		8119.4

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE	
SITE DATE	020	023	020	023	020	023
10/ 1	1408.4	9494.1	83.2	82.1		
10/ 2	1435.7	6845.1	83.7	89.4		
10/ 3	1714.3		22.0			
10/ 4	1809.1		6.5			
10/ 5	1976.1		31.6			
10/ 6	1928.8		39.1			
10/ 7			33.6			
10/ 8			30.3			
10/ 9			42.1			
10/10			65.7			
10/11			57.6			
10/12			36.6			
10/13			48.8			
10/14			56.8			
10/15			68.3			
10/16	548.6		67.1			
10/17	551.9		64.2			
10/18	548.8		55.9			
10/19		1964.1	33.0			
10/20		1388.0	18.0	26.3		
10/21			14.1			
10/22		2075.0	10.1			
10/23			30.5			
10/24		1712.2	27.6			
10/25	661.4		29.7			
10/26	742.8	2020.2	47.5			
10/27	753.7	2430.4	57.5	22.2		
10/28	748.5		54.4			
10/29	743.8	2595.2	59.3	14.2		
10/30		2484.0	22.0	17.4		
10/31	766.4	2662.2	36.5	29.4		

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	HYDROGEN SULFIDE					TOTAL PRECIPITATION (INCHES)				
SITE DATE	020	021	022	023	024	020	021	022	023	024
10/ 1	0.0	0.0	0.9	0.1						
10/ 2	0.0	0.0	0.8	0.5						
10/ 3		0.0	0.0							
10/ 4	0.0	0.0	0.0							
10/ 5	0.0	0.0								
10/ 6	0.0	0.0								
10/ 7	0.0	0.0								
10/ 8	0.0	0.0		0.0						
10/ 9	0.4	0.6		0.0						
10/10	0.0	1.3		0.0						
10/11	0.0	0.3								
10/12	0.0	0.5								
10/13	0.0	1.9								
10/14	0.0	1.2								
10/15	0.0	0.0								
10/16	0.0	0.0								
10/17	0.0	0.0								
10/18	0.2									
10/19	0.0	0.4		0.0						
10/20	0.0	1.4								
10/21	0.1	0.0		0.3	0.0					
10/22	0.0	1.3		0.0						
10/23	0.0	0.0	0.0	13.3	0.0					
10/24	0.0	0.0	0.3	0.0	0.0					
10/25	0.0	0.0	1.2							
10/26	0.0	0.0	1.3	0.0						
10/27	0.0	0.0	1.6	0.0						
10/28	0.0		2.1							
10/29	0.0	0.1	1.7	0.0						
10/30	0.0	0.0	1.6	0.0	0.0					
10/31	0.0	0.0	1.5	6.1	0.0					

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	RELATIVE HUMIDITY				TEMPERATURE OUTSIDE			
SITE DATE	020	021	022	024	020	021	022	024
10/ 1	28.7	27.6	27.1		48.0	46.0	48.1	
10/ 2	25.5	28.0	22.2		47.1	46.9	52.4	
10/ 3	41.4	47.9	45.7		47.8	44.9	50.3	
10/ 4	62.1	63.1	64.0		48.2	49.4	51.3	
10/ 5	88.9	83.6			35.2	36.5		
10/ 6	70.4	67.0			36.2	34.8		
10/ 7	54.5	51.9			42.0	39.5		
10/ 8	47.7	56.2			43.8	39.8		
10/ 9	49.0	51.4			45.9	41.3		
10/10	53.8	57.4			45.7	42.7		
10/11	85.0	81.3			36.9	36.5		
10/12	87.6	77.8			37.8	37.3		
10/13	69.3	63.9			38.5	37.3		
10/14	63.9				34.1			
10/15	51.8	51.9			37.7	34.7		
10/16	45.0	48.9			43.0	39.0		
10/17	46.1	51.0			45.4	42.5		
10/18	44.5			32.6	45.9			
10/19	39.0	44.1		26.2	46.7	43.2		
10/20	36.5	37.4		25.6	47.6	46.3		
10/21	53.4	55.2		37.0	46.0	44.3		
10/22	77.8	73.4			43.2	42.4		
10/23	80.2	77.1		80.5	42.9	41.8		
10/24	81.3	76.6	87.7		41.9	40.5	43.5	
10/25	85.3	76.9	88.7		35.9	34.8	38.1	
10/26	67.1	67.4	68.9		39.1	36.1	41.7	
10/27	67.4	67.8	70.7		40.0	39.0	42.3	
10/28	74.6		80.9		40.2		41.9	
10/29		83.7	93.9			34.4	35.6	
10/30	81.7	74.7	85.5	78.0	27.6	28.1	29.9	
10/31	74.7	72.1	80.6	79.0	32.5	33.6	34.4	

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED				WIND DIRECTION			
SITE DATE	020	021	022	024	020	021	022	024
10/ 1	0.9	0.2	4.8		116.7	308.0	94.8	
10/ 2	2.1	1.8	5.0		145.4	164.6	118.9	
10/ 3	3.3	6.4	6.9		143.3	149.7	113.0	
10/ 4	0.8	1.7	1.5		256.4	168.3	273.8	
10/ 5	0.1	0.7			207.9	61.6		
10/ 6	0.9	0.3			276.9	337.4		
10/ 7	0.4	0.7			130.5	350.7		
10/ 8	1.2	0.8			105.1	357.4		
10/ 9	2.5	2.2			160.7	158.5		
10/10	0.6	0.4			114.3	120.0		
10/11	1.0	2.7			98.1	130.2		
10/12	0.1	0.2			280.7	180.8		
10/13	0.2	0.0			47.5	40.2		
10/14	0.7				323.8			
10/15	0.7				99.0			
10/16	0.8				86.3			
10/17	0.7				142.3			
10/18	0.6				117.2			
10/19	0.6	1.3			156.7	171.3		
10/20	1.7	3.3			161.5	164.6		
10/21	3.3	3.9			138.6	149.5		
10/22	0.0	0.7			136.8	0.2		
10/23	2.0	2.3	1.6		145.0	154.7	137.0	
10/24	0.7	2.0	1.2		332.4	331.0	69.6	
10/25	0.6	0.6	1.5		242.2	346.7	86.7	
10/26	0.5	0.5	3.9		133.8	33.6	117.1	
10/27	0.9	1.8	1.2		295.5	333.8	125.1	
10/28	1.4		3.7		170.1		115.8	
10/29	0.1	1.3	1.2		325.2	137.0	106.5	
10/30	0.9	3.7	1.9		184.7	131.7	120.7	
10/31	0.9	4.2	1.3		194.5	137.2	94.4	

TABLE IV, DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED			
SITE	(8-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
DATE				
10/ 1	0,5		2,8	
10/ 2	1,9		6,6	
10/ 3				
10/ 4				
10/ 5	0,3		1,1	
10/ 6				
10/ 7			1,3	
10/ 8			1,0	
10/ 9	2,2		8,0	
10/10	0,4		1,6	
10/11	0,5		1,0	
10/12	0,0		0,8	
10/13	0,1		1,6	
10/14	0,8		2,8	
10/15	0,3		0,9	
10/16	0,6		2,1	
10/17	1,1	1,5	2,3	
10/18		2,6	3,2	
10/19	3,0	3,7	4,0	
10/20	4,4	6,1	8,3	
10/21	9,1	12,1	14,6	
10/22	1,6	2,0	2,1	
10/23		4,8	6,1	
10/24		1,4		1,1
10/25				
10/26		3,4	3,3	3,4
10/27		3,1	3,3	2,9
10/28				
10/29		3,6	4,7	5,3
10/30		9,9	9,7	10,5
10/31		12,6	15,2	16,9

TABLE IV, DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SITE	WIND DIRECTION			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
DATE	023	023	023	023
10/ 1	246.6		316.3	
10/ 2	204.4		180.7	
10/ 3				
10/ 4				
10/ 5	302.4		263.0	
10/ 6				
10/ 7			308.7	
10/ 8			336.9	
10/ 9	202.0		178.5	
10/10	225.2		202.8	
10/11	148.5		110.5	
10/12	245.5		227.7	
10/13	260.2		309.5	
10/14	312.8		311.7	
10/15	233.6		350.5	
10/16	229.9		359.5	
10/17	294.1	295.6	327.7	
10/18		298.8	312.3	
10/19	233.0	218.8	209.4	
10/20	214.8	196.6	185.3	
10/21	191.4	175.9	165.3	
10/22	221.2	214.2	189.6	
10/23		172.4	163.9	
10/24		126.0		190.5
10/25				
10/26		215.5	207.2	223.2
10/27		284.4	288.2	300.0
10/28				
10/29		167.0	146.4	162.2
10/30		200.9	180.3	201.3
10/31		208.1	197.8	211.9

TABLE IV, DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

RELATIVE HUMIDITY

SITE DATE	(8-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
10/ 1	20.8	21.7	20.6	27.1
10/ 2	21.7	22.2	20.8	27.5
10/ 3				
10/ 4				
10/ 5	86.3	89.9	90.3	95.5
10/ 6				
10/ 7	40.6	38.8	35.4	43.3
10/ 8	31.7	30.3	27.3	35.6
10/ 9	34.7	35.5	33.1	40.3
10/10	40.1	41.0	38.8	46.0
10/11	70.8	76.7	76.2	83.2
10/12				
10/13	60.0	59.6	56.0	64.7
10/14	48.5	48.0	46.4	53.5
10/15	33.0	30.7	27.3	36.6
10/16		30.7	27.7	36.1
10/17	30.1	30.6	29.7	37.0
10/18		30.5	29.6	37.1
10/19	25.3	27.0	26.1	33.9
10/20	25.6	28.3	27.1	34.6
10/21	46.9	49.0	48.9	56.7
10/22	77.9	76.0	72.5	78.5
10/23	79.7	78.7	75.4	84.4
10/24				
10/25				
10/26	62.0	58.6	51.0	66.9
10/27	63.4	62.0	56.3	70.4
10/28				
10/29	85.8	88.5	84.8	93.9
10/30	83.8	81.7	74.9	89.0
10/31	81.9	81.4	77.3	90.4

TABLE IV. DAILY AVERAGES FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
SITE	(8-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
DATE				
10/ 1	58.5	61.0		59.6
10/ 2	55.3	58.5		58.2
10/ 3				
10/ 4				
10/ 5	42.0	43.9	43.6	43.1
10/ 6				
10/ 7	45.1	46.2	46.6	46.5
10/ 8	47.2	49.4	49.5	49.2
10/ 9	49.4	51.0	51.4	51.2
10/10	44.0	47.2	47.4	46.5
10/11	37.3	38.5	38.3	38.3
10/12		46.3	46.1	45.4
10/13	51.7	53.8	53.9	53.8
10/14	46.5	49.3	49.0	49.6
10/15	47.9	50.1	49.8	48.0
10/16		49.0	50.9	50.5
10/17				
10/18				
10/19	55.9	57.9	58.2	57.4
10/20	55.1	57.3	57.7	57.3
10/21	50.4	51.6	50.8	50.5
10/22	45.6	45.5	45.2	46.6
10/23	44.3	44.1	44.9	44.3
10/24		41.2	41.6	41.7
10/25				
10/26	44.9	46.0	47.1	46.3
10/27	44.0	44.8	45.1	44.9
10/28				
10/29	35.3	35.0	35.7	35.7
10/30	30.2	29.8	31.0	30.9
10/31	33.2	32.3	32.7	32.6

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE DATE	020	023	020	023	020	023
10/ 1	24.3(19:40)	174.1(1:25)	7.5(13:55)	136.7(3:15)	22.5(19:40)	39.3(1:25)
10/ 2	24.3(8:00)	26.2(17:25)	9.4(21:25)	26.2(17:25)	24.3(8:00)	16.9(6:00)
10/ 3	39.3(21:25)	20.6(3:55)	39.3(21:25)	20.6(3:55)	20.6(22:25)	16.9(3:40)
10/ 4	82.4(8:55)		41.2(14:25)		69.3(8:55)	
10/ 5	56.2(1:20)		30.0(22:45)		56.2(1:20)	
10/ 6	86.1(12:55)		74.9(12:55)		35.6(8:10)	
10/ 7	52.4(8:10)	76.8(4:05)	30.0(2:50)	73.0(3:25)	44.9(8:10)	76.8(4:05)
10/ 8	35.6(20:25)		18.7(16:55)		33.7(20:25)	
10/ 9	31.8(8:50)		20.6(7:55)		31.8(8:50)	
10/10	28.1(8:30)	20.6(17:30)	22.5(5:55)	20.6(17:30)	26.2(8:40)	0.0(12:00)
10/11	35.6(8:35)		13.1(8:35)		30.0(15:35)	
10/12	26.2(8:55)		11.2(8:35)		24.3(7:05)	
10/13	26.2(7:55)		11.2(10:25)		26.2(19:50)	
10/14	28.1(8:30)		15.0(8:25)		22.5(3:55)	
10/15	31.8(18:45)		5.6(9:55)		30.0(18:45)	
10/16	20.6(19:15)		0.0(0:00)		20.6(19:15)	
10/17	28.1(6:20)		0.0(0:00)		28.1(6:20)	
10/18	15.0(6:45)	13.1(22:00)	0.0(0:00)	7.5(18:45)	15.0(6:45)	9.4(20:40)
10/19	22.5(8:00)	13.1(3:45)	22.5(8:00)	11.2(6:35)	11.2(7:55)	11.2(16:40)
10/20	16.9(2:15)	13.1(8:50)	16.9(2:15)	9.4(8:35)	9.4(6:55)	13.1(13:20)
10/21	15.0(5:30)	15.0(1:40)	15.0(5:30)	11.2(11:05)	7.5(1:15)	11.2(4:25)
10/22		37.4(14:55)		37.4(14:55)		9.4(13:45)
10/23	0.0(0:00)	73.0(8:55)	0.0(0:00)	59.9(12:55)	0.0(0:00)	73.0(8:55)
10/24	0.0(0:00)	13.1(2:00)	0.0(0:00)	0.0(0:05)	0.0(0:00)	13.1(2:00)
10/25	1.9(20:00)	30.0(14:20)	1.9(20:00)	30.0(14:20)	0.0(0:00)	1.9(17:30)
10/26	1.9(0:30)	0.0(0:00)	1.9(0:30)	0.0(0:00)	0.0(0:00)	0.0(0:00)
10/27	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:00)
10/28	13.1(20:10)	35.6(18:10)	5.6(22:25)	0.0(18:10)	13.1(20:10)	35.6(18:10)
10/29	13.1(2:55)	168.5(15:35)	9.4(8:35)	3.7(16:25)	11.2(2:20)	18.7(0:55)
10/30	22.5(9:20)	1.9(10:30)	9.4(11:00)	1.9(10:30)	20.6(9:15)	1.9(14:10)
10/31	11.2(21:35)	7.5(14:05)	9.4(6:15)	3.7(6:40)	11.2(21:35)	3.7(14:05)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SULFUR DIOXIDE(SO2)

SITE	020	021	022	023	024
10/ 1	0.0(0:00)	0.0(0:00)	41.7(13:35)	52.1(3:05)	
10/ 2	0.0(0:00)	10.4(18:35)	7.8(0:00)	109.4(22:10)	
10/ 3	7.8(0:35)	2.6(11:40)	0.0(0:00)	75.5(1:25)	
10/ 4		0.0(0:00)	0.0(0:00)	0.0(15:00)	
10/ 5		0.0(0:00)		18.2(17:35)	
10/ 6		72.9(13:15)		20.8(16:30)	
10/ 7	112.0(15:40)	270.9(13:15)		18.2(1:15)	
10/ 8	52.1(21:30)	0.0(0:00)		0.0(0:00)	
10/ 9	54.7(6:00)	10.4(0:15)		0.0(0:00)	
10/10	0.0(0:00)	0.0(0:00)		0.0(0:00)	
10/11	0.0(0:00)	0.0(0:00)		31.3(13:50)	
10/12	0.0(0:00)	0.0(0:00)		20.8(0:35)	
10/13	0.0(0:00)	0.0(0:00)		10.4(18:30)	
10/14	0.0(0:00)	0.0(0:00)		28.7(11:20)	
10/15	135.5(12:40)	5.2(4:55)		88.6(15:25)	
10/16	23.4(9:15)	5.2(17:50)			
10/17	0.0(0:00)	36.5(6:50)			
10/18	224.0(13:35)	0.0(23:05)			
10/19	0.0(0:00)	10.4(12:55)			
10/20	0.0(0:00)	33.9(22:35)			
10/21	86.0(12:55)	54.7(16:45)		0.0(0:00)	
10/22	0.0(0:00)	31.3(17:40)		0.0(0:05)	10.4(22:30)
10/23	0.0(0:00)	31.3(1:20)		2.6(4:15)	15.6(2:05)
10/24	0.0(0:00)	23.4(21:20)		0.0(0:05)	15.6(0:05)
10/25	0.0(0:00)	5.2(14:30)		0.0(14:20)	
10/26	0.0(0:00)	0.0(0:00)		0.0(0:00)	
10/27	0.0(0:00)	31.3(16:30)		5.2(21:05)	
10/28	28.7(14:00)	2.6(16:10)		52.1(18:10)	
10/29	0.0(0:00)	221.4(5:35)		0.0(0:00)	
10/30	0.0(0:00)	26.0(5:35)		0.0(0:00)	7.8(15:35)
10/31	0.0(0:00)	33.9(20:30)		0.0(0:00)	2.6(23:05)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE DATE	020	023	020	023	020	023
10/ 1		20188.1(0:05)		19703.6(20:50)		12112.9(14:15)
10/ 2	1394.9(13:30)	20188.1(0:00)	642.8(2:25)	17159.9(17:30)	1066.1(13:30)	19098.0(3:00)
10/ 3		20188.1(0:10)		15867.9(5:10)		12213.8(6:25)
10/ 4	747.6(5:30)	20188.1(12:45)	683.8(21:00)	18108.8(12:30)	481.9(7:05)	8034.9(22:10)
10/ 5	1343.5(4:00)		864.8(4:20)		1232.8(4:00)	
10/ 6	2903.2(7:15)	7671.5(22:05)	2903.2(7:15)	5208.5(19:00)	671.4(6:50)	3432.0(22:05)
10/ 7	2597.6(9:15)	21338.9(2:35)		21338.9(0:05)		16998.4(2:35)
10/ 8						
10/ 9						
10/10	766.5(5:55)					
10/11		21338.9(17:40)				
10/12		12859.8(2:55)				
10/13						
10/14						
10/15	2995.0(12:50)		2995.0(12:50)		483.2(18:20)	
10/16	987.9(0:45)					
10/17	2190.1(22:25)					
10/18	2968.3(9:00)		836.8(23:25)	847.9(22:00)	63.8(18:55)	
10/19	861.6(3:55)		823.8(4:00)	8394.4(12:50)	72.9(3:55)	
10/20	857.0(4:10)		809.5(22:25)	827.7(0:05)	60.6(3:55)	
10/21	1105.1(13:20)		963.8(13:55)	827.7(14:20)	354.9(13:10)	
10/22	1499.8(11:10)			13727.9(15:45)		
10/23	2392.5(5:55)	20188.1(0:45)		859.6(21:45)		
10/24	1553.9(21:10)		1229.5(21:10)	868.1(8:05)	222.7(23:45)	
10/25	2639.4(18:10)	20188.1(14:20)	1014.6(21:40)	5854.6(18:10)	1950.4(18:10)	19380.6(15:35)
10/25	963.8(21:20)	20188.1(0:00)	920.8(21:20)	924.7(18:00)	634.9(1:00)	19413.2(7:20)
10/27	1040.0(22:20)	20188.1(0:10)	939.7(23:55)	905.2(3:30)	171.9(22:20)	19530.4(17:55)
10/28	1115.2(19:15)		978.1(0:00)	892.2(18:40)	218.2(19:10)	
10/29	944.4(4:25)	20188.1(0:00)	687.6(4:30)	931.3(7:20)	138.7(5:10)	19406.7(16:50)
10/30	933.4(22:45)	20188.1(0:00)	851.2(0:25)	866.1(16:30)	92.5(1:50)	19406.7(2:50)
10/31	943.0(1:25)	20188.1(0:05)	854.4(20:40)	931.3(14:40)	87.9(4:00)	19374.1(22:45)

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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT    1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)


                                         HYDROGEN SULFIDE          (

    SITE          020          021          022          023          024
-----------------------------------------------------------------------------------------
10/ 1        0.0( 0:00)   0.0( 0:00)  31.8( 4:05)  12.5(23:10)
10/ 2        0.0( 0:00)   0.0( 0:00)   0.0( 0:00)  22.1(11:40)
10/ 3        2.8( 0:45)   0.0( 0:00)   0.0( 0:00)   0.0( 0:00)
10/ 4        0.0( 3:25)   0.0( 0:00)   0.0( 0:00)   0.0( 0:05)
10/ 5        0.0( 0:00)   0.0( 0:00)
10/ 6        0.0( 0:00)   0.0( 0:00)
10/ 7        0.0( 0:00)   0.0( 0:00)               34.6(19:30)
10/ 8        0.0( 0:00)   0.0( 0:00)                0.0( 0:00)
10/ 9        0.0( 0:00)   2.8(20:00)                0.0( 0:00)
10/10        0.0( 0:00)   2.5( 0:00)                0.0( 0:00)
-----------------------------------------------------------------------------------------
10/11        0.0( 0:00)   2.8(17:35)
10/12        0.0( 0:00)   2.5(18:35)                0.0(12:40)
10/13        0.0( 0:00)   2.6( 0:00)
10/14        0.0( 0:00)   2.5( 0:00)
10/15        0.0( 0:00)   1.4( 0:00)
10/16        0.0( 0:00)  22.1(22:00)
10/17        0.0( 0:00)   0.0( 0:00)
10/18       29.1(13:35)   4.2(23:05)
10/19        0.0( 0:00)   4.2( 0:00)                0.0( 5:00)
10/20        0.0( 0:00)  49.8(19:05)
-----------------------------------------------------------------------------------------
10/21       40.1(12:55)   0.0( 0:00)               58.1(17:25)   0.0( 0:00)
10/22        0.0( 0:00)  56.7( 0:00)                0.0( 0:05)   0.0(16:35)
10/23        0.0( 0:00)   0.0( 3:30)   0.0(11:00) 262.9( 9:50)   0.0( 0:00)
10/24        0.0( 0:00)   0.0( 0:00)   2.8(20:00)   0.0( 0:05)   0.0( 0:00)
10/25        0.0( 0:00)   0.0( 0:00)   2.8(10:15)   0.0(14:20)
10/26        0.0( 0:00)   0.0( 0:00)   1.4( 0:10)   0.0( 0:00)
10/27        0.0( 0:00)   1.4( 5:05)   4.2(13:25)   0.0( 0:00)
10/28        4.2(14:00) 155.0(20:05)   4.2( 6:05)   0.0(18:10)
10/29        0.0( 0:00)  27.7( 2:55)   4.2( 3:30)   0.0( 0:00)   0.0( 0:00)
10/30        0.0( 0:00)   0.0( 0:00)   4.2( 4:20)   0.0( 0:00)   0.0( 0:05)
-----------------------------------------------------------------------------------------
10/31        0.0( 0:00)   0.0( 0:00)   4.2( 9:40) 290.6(19:40)   0.0( 0:05)
```

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE	
SITE DATE	020	023	020	023	020	023
10/ 1	1734.6(9:50)	25520.2(20:45)	127.0(12:25)	123.1(4:50)		
10/ 2	1655.9(4:10)	18149.0(7:15)	117.2(13:25)	216.9(7:00)		
10/ 3	1975.2(3:55)	13178.9(6:35)	80.1(0:30)	214.9(6:25)		
10/ 4	2595.4(7:05)	21276.2(12:15)	21.5(14:45)	154.3(12:10)		
10/ 5	3649.2(4:00)		86.0(18:10)	13.7(0:05)		
10/ 6	2366.2(4:15)	24850.1(18:25)	234.4(13:00)			
10/ 7	5640.1(9:40)		82.1(11:20)	99.6(15:30)		
10/ 8			76.2(14:30)			
10/ 9			195.4(17:00)			
10/10	1879.3(5:55)		99.6(12:50)			
10/11			103.5(14:10)			
10/12			74.2(16:50)			
10/13			107.5(12:20)			
10/14		36521.3(6:05)	111.4(14:45)			
10/15	5155.8(18:55)		115.3(13:10)			
10/16	5592.3(16:45)		107.5(10:15)			
10/17	5561.8(17:45)		105.5(10:50)			
10/18	3588.8(12:55)	3015.5(21:45)	93.8(9:10)	19.5(19:00)		
10/19	523.1(0:35)	7471.6(18:15)	78.1(12:50)	19.5(3:20)		
10/20	2744.9(23:50)	10163.4(5:35)	48.8(10:55)	48.8(16:20)		
10/21	5333.6(13:15)	5416.8(19:25)	48.8(13:40)	142.6(17:35)		
10/22	4944.5(23:40)	25179.5(15:40)	48.8(14:25)			
10/23	1355.2(7:25)	37343.0(3:05)	66.4(18:35)			
10/24	4974.6(22:55)	3294.7(10:00)	64.5(12:30)	76.2(4:40)		
10/25	3462.3(13:15)	18209.4(18:10)	195.4(5:20)			
10/26	1102.0(18:50)	3243.5(10:05)	105.5(12:20)			
10/27	898.0(5:45)	4461.7(17:35)	97.7(11:25)	31.3(20:45)		
10/28	837.0(8:50)	4868.6(23:30)	97.7(14:20)	27.4(18:10)		
10/29	834.6(7:35)	5209.4(3:50)	103.5(15:25)	19.5(0:15)		
10/30	835.4(1:40)	3562.5(8:00)	64.5(0:30)	31.3(22:05)		
10/31	874.1(21:30)	7258.4(22:10)	91.8(13:15)	50.8(14:05)		

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TABLE V, MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT   1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)


                                        TOTAL PRECIPITATION
                                             (INCHES)
   SITE          020            021            022            023            024
------------------------------------------------------------------------------------------------
10/ 1
10/ 2
10/ 3
10/ 4
10/ 5
10/ 6
10/ 7
10/ 8
10/ 9
10/10
------------------------------------------------------------------------------------------------
10/11
10/12
10/13
10/14
10/15
10/16
10/17
10/18
10/19
10/20
------------------------------------------------------------------------------------------------
10/21
10/22
10/23
10/24
10/25
10/26
10/27
10/28
10/29
10/30
------------------------------------------------------------------------------------------------
10/31
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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT   1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)


                                           TEMPERATURE OUTSIDE

   SITE            020              021              022              024
-------------------------------------------------------------------------------------------------------
10/ 1         69.0(14:30)      71.0(14:50)      71.0(12:45)
10/ 2         73.0(13:20)      73.0(14:50)      73.0(16:05)
10/ 3         63.0(13:00)      70.0(13:05)      70.0(12:45)
10/ 4         58.0(15:25)      59.0(13:50)      60.0(16:55)
10/ 5         47.0(16:50)      49.0(16:05)
10/ 6         56.0(16:10)      55.0(16:00)
10/ 7         62.0(14:50)      67.0(15:10)
10/ 8         67.0(16:40)      64.0(15:20)
10/ 9         64.0(14:40)      63.0(17:20)
10/10         63.0(15:15)      63.0(14:20)
-------------------------------------------------------------------------------------------------------
10/11         54.0(13:15)      53.0(13:25)
10/12         48.0(16:00)      51.0(16:55)
10/13         56.0(16:55)      58.0(16:15)
10/14         53.0(15:55)      37.0(10:05)
10/15         62.0(15:55)      62.0(15:30)
10/16         65.0(13:10)      64.0(16:30)
10/17         69.0(13:30)      69.0(14:40)
10/18         71.0(15:40)      36.0(23:05)
10/19         70.0(14:30)      71.0(14:45)
10/20         68.0(13:15)      69.0(13:20)
-------------------------------------------------------------------------------------------------------
10/21         59.0(13:55)      62.0(15:10)
10/22         57.0(14:30)      57.0(13:40)
10/23         52.0(11:35)      52.0(11:55)      53.0(12:05)
10/24         51.0(16:00)      52.0(13:05)      53.0(14:35)
10/25         54.0(16:25)      53.0(14:40)      56.0(15:50)
10/26         57.0(13:15)      58.0(12:45)      59.0(14:20)
10/27         54.0(13:35)      54.0(15:50)      56.0(12:45)
10/28         51.0(14:25)      52.0(14:05)      53.0(14:50)
10/29         39.0( 0:00)      41.0(11:00)      41.0(10:30)
10/30         37.0(14:35)      37.0(11:40)      38.0(12:10)
-------------------------------------------------------------------------------------------------------
10/31         37.0(17:00)      39.0(16:00)      39.0(15:20)
```

TABLE V, MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

WIND SPEED - WIND DIRECTION

SITE	020		021		022		024
10/ 1	11,0	284,0(15:30)	11,0	315,0(12:50)	15,0	92,0(1:40)	
10/ 2	9,0	141,0(8:50)	11,0	160,0(14:55)	13,0	116,0(4:15)	
10/ 3	14,0	98,0(18:30)	23,0	164,0(14:40)	17,0	114,0(15:25)	
10/ 4	11,0	289,0(11:20)	13,0	296,0(11:00)	13,0	275,0(11:55)	
10/ 5	6,0	125,0(4:35)	9,0	112,0(4:15)			
10/ 6	9,0	264,0(13:45)	9,0	317,0(13:05)			
10/ 7	7,0	267,0(15:20)	11,0	324,0(16:45)			
10/ 8	6,0	144,0(8:50)	11,0	334,0(15:45)			
10/ 9	11,0	233,0(12:05)	13,0	169,0(15:00)			
10/10	10,0	293,0(17:25)	11,0	252,0(17:10)			
10/11	12,0	337,0(14:05)	16,0	136,0(18:05)			
10/12	3,0	275,0(10:10)	4,0	130,0(0:10)			
10/13	6,0	287,0(14:15)	7,0	330,0(17:05)			
10/14	9,0	296,0(14:35)					
10/15	5,0	130,0(1:40)					
10/16	7,0	275,0(10:50)					
10/17	7,0	277,0(13:50)					
10/18	9,0	272,0(13:25)	4,0	172,0(23:10)			
10/19	9,0	271,0(13:45)	9,0	275,0(13:35)			
10/20	10,0	133,0(8:25)	13,0	165,0(14:45)			
10/21	15,0	275,0(10:25)	18,0	153,0(11:35)			
10/22	8,0	128,0(3:30)	12,0	323,0(7:30)			
10/23	11,0	141,0(13:00)	13,0	161,0(12:40)	11,0	144,0(12:35)	
10/24	7,0	8,0(14:55)	12,0	338,0(15:30)	8,0	292,0(12:30)	
10/25	7,0	269,0(14:00)	8,0	324,0(14:50)	9,0	82,0(7:05)	
10/26	7,0	180,0(11:35)	9,0	340,0(12:10)	11,0	116,0(5:25)	
10/27	10,0	288,0(16:50)	12,0	339,0(15:00)	12,0	259,0(17:10)	
10/28	8,0	151,0(13:55)	11,0	171,0(16:35)	13,0	113,0(14:15)	
10/29	9,0	289,0(12:40)	9,0	227,0(17:55)	11,0	276,0(12:10)	
10/30	9,0	178,0(13:20)	14,0	161,0(13:30)	10,0	118,0(0:30)	
10/31	9,0	212,0(13:50)	10,0	125,0(7:45)	8,0	106,0(7:20)	

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

WIND SPEED - WIND DIRECTION

SITE DATE	(8-FT) 023		(30-FT) 023		(100-FT) 023		(200-FT) 023	
10/ 1	7.0	333.0(13:00)			17.0	342.0(12:50)		
10/ 2	12.0	225.0(17:30)			20.0	183.0(19:15)		
10/ 3	8.0	190.0(1:35)			16.0	176.0(1:35)		
10/ 4	11.0	205.0(16:20)			19.0	183.0(16:20)		
10/ 5	4.0	313.0(8:40)			8.0	279.0(8:50)		
10/ 6					7.0	336.0(15:50)		
10/ 7					10.0	309.0(13:45)		
10/ 8					12.0	287.0(17:00)		
10/ 9	11.0	189.0(11:05)			21.0	192.0(13:40)		
10/10	5.0	148.0(9:40)			20.0	320.0(16:15)		
10/11	7.0	133.0(13:35)			14.0	141.0(18:25)		
10/12	2.0	273.0(22:45)			5.0	195.0(19:40)		
10/13	3.0	327.0(12:30)			10.0	327.0(13:25)		
10/14	9.0	343.0(14:00)			14.0	331.0(14:00)		
10/15	6.0	242.0(19:55)			10.0	351.0(15:20)		
10/16	9.0	288.0(12:25)	7.0	112.0(6:30)	13.0	304.0(12:55)	8.0	4.0(18:20)
10/17	7.0	312.0(14:45)	10.0	333.0(17:20)	12.0	323.0(17:20)	12.0	340.0(17:30)
10/18	6.0	333.0(17:30)	12.0	319.0(14:40)	13.0	312.0(14:40)		
10/19	13.0	228.0(12:50)	15.0	219.0(12:25)	17.0	213.0(12:25)		
10/20	17.0	230.0(14:30)	21.0	213.0(13:50)	24.0	205.0(13:50)		
10/21	25.0	201.0(10:50)	31.0	186.0(10:50)	35.0	175.0(10:50)		
10/22	11.0	173.0(4:50)	15.0	164.0(4:45)	19.0	160.0(4:40)		
10/23	5.0	137.0(0:20)	22.0	183.0(12:40)	24.0	173.0(12:40)	22.0	199.0(13:20)
10/24			7.0	160.0(1:30)	7.0	147.0(1:25)	8.0	219.0(5:10)
10/25			8.0	291.0(16:15)	9.0	287.0(16:15)	7.0	313.0(15:40)
10/26			14.0	192.0(12:45)	15.0	207.0(11:00)	14.0	199.0(10:45)
10/27			15.0	7.0(14:35)	16.0	356.0(14:35)	15.0	3.0(14:35)
10/28			14.0	173.0(22:20)	16.0	160.0(22:20)	17.0	176.0(22:25)
10/29			18.0	180.0(19:40)	21.0	168.0(19:40)	23.0	184.0(19:40)
10/30			17.0	211.0(14:10)	20.0	202.0(14:10)	21.0	205.0(20:40)
10/31			23.0	214.0(9:20)	28.0	200.0(9:45)	31.0	219.0(9:45)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

RELATIVE HUMIDITY

SITE DATE	(8-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
10/ 1	25.0(5:15)	25.0(7:20)	23.0(7:25)	29.0(5:40)
10/ 2	26.0(7:10)	26.0(4:35)	24.0(8:50)	30.0(4:15)
10/ 3	26.0(6:45)	26.0(6:55)	24.0(6:05)	31.0(5:55)
10/ 4	83.0(23:45)	81.0(23:00)	79.0(23:30)	87.0(22:50)
10/ 5	93.0(7:00)	99.0(10:55)	100.0(6:40)	100.0(3:00)
10/ 6	91.0(13:45)	94.0(13:40)	92.0(13:40)	100.0(13:40)
10/ 7	63.0(6:00)	57.0(7:25)	50.0(7:15)	59.0(3:55)
10/ 8	45.0(6:00)	39.0(7:00)	54.0(20:10)	49.0(20:10)
10/ 9	43.0(6:25)	43.0(7:50)	55.0(12:30)	45.0(5:55)
10/10	52.0(8:20)	56.0(8:55)	55.0(8:45)	60.0(16:15)
10/11	89.0(22:05)	96.0(17:15)	95.0(17:15)	100.0(17:00)
10/12	92.0(5:55)	99.0(5:40)	100.0(5:50)	100.0(0:00)
10/13	91.0(5:30)	89.0(1:10)	85.0(0:40)	97.0(0:20)
10/14	87.0(7:30)	78.0(7:40)	78.0(7:25)	87.0(7:25)
10/15	45.0(0:45)	40.0(3:00)	34.0(3:20)	57.0(12:40)
10/16	39.0(6:00)	36.0(8:55)	45.0(16:55)	98.0(16:00)
10/17	37.0(5:35)	38.0(5:15)	35.0(4:40)	41.0(5:15)
10/18	28.0(23:30)	40.0(6:30)	40.0(6:40)	45.0(6:00)
10/19	31.0(6:30)	32.0(7:30)	30.0(7:30)	39.0(7:05)
10/20	32.0(7:45)	36.0(8:10)	32.0(7:15)	41.0(5:20)
10/21	92.0(20:10)	94.0(20:05)	95.0(20:15)	100.0(19:15)
10/22	100.0(3:45)	100.0(0:45)	100.0(0:40)	100.0(0:15)
10/23	91.0(22:50)	92.0(20:30)	95.0(15:05)	99.0(20:30)
10/24	91.0(2:00)	92.0(5:25)	90.0(9:35)	99.0(0:05)
10/25	84.0(23:55)	82.0(23:45)	78.0(23:55)	97.0(23:35)
10/26	85.0(0:05)	83.0(0:05)	79.0(0:05)	95.0(0:00)
10/27	76.0(6:45)	74.0(8:55)	67.0(5:10)	86.0(7:40)
10/28	79.0(19:15)	79.0(19:20)	74.0(18:15)	90.0(19:10)
10/29	95.0(18:25)	100.0(16:50)	100.0(16:40)	100.0(14:45)
10/30	93.0(4:30)	90.0(0:00)	83.0(3:35)	99.0(4:50)
10/31	92.0(3:20)	87.0(22:20)	84.0(22:00)	96.0(22:05)

TABLE V, MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR OCT 1 THRU 31
(UNITS; CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
DATE				
10/ 1	78.0(13:25)	77.0(13:25)		71.0(11:55)
10/ 2	80.0(14:10)	79.0(14:10)	69.0(17:15)	73.0(14:20)
10/ 3	50.0(1:40)	59.0(1:35)	59.0(1:20)	57.0(1:35)
10/ 4	72.0(15:05)	67.0(0:05)	65.0(15:05)	66.0(5:05)
10/ 5	57.0(16:30)	52.0(16:25)	50.0(0:05)	55.0(16:40)
10/ 6	55.0(13:50)	51.0(15:35)	50.0(15:40)	51.0(14:00)
10/ 7	66.0(13:35)	58.0(13:50)	76.0(15:10)	80.0(15:10)
10/ 8	70.0(14:30)	62.0(15:00)	60.0(14:55)	65.0(15:05)
10/ 9	67.0(14:00)	61.0(15:05)	59.0(15:05)	60.0(15:40)
10/10	62.0(16:15)	59.0(16:15)	57.0(17:10)	56.0(12:00)
10/11	55.0(12:50)	50.0(13:30)	48.0(13:00)	51.0(18:00)
10/12	62.0(15:45)	57.0(16:15)	56.0(16:30)	59.0(15:40)
10/13	73.0(14:45)	66.0(15:40)	64.0(15:35)	68.0(15:00)
10/14	70.0(15:20)	63.0(16:10)	61.0(16:05)	64.0(15:25)
10/15	83.0(15:30)	76.0(16:00)	74.0(16:00)	76.0(17:00)
10/16	64.0(10:50)	63.0(13:40)	63.0(15:45)	66.0(14:50)
10/17				
10/18	68.0(17:30)	69.0(17:30)	68.0(17:30)	69.0(17:30)
10/19	72.0(14:35)	70.0(13:40)	69.0(15:40)	70.0(13:35)
10/20	69.0(13:40)	68.0(13:40)	66.0(13:40)	67.0(14:10)
10/21	60.0(14:30)	58.0(10:15)	58.0(14:35)	58.0(14:35)
10/22	57.0(13:45)	55.0(13:45)	55.0(16:00)	57.0(14:10)
10/23	53.0(12:35)	51.0(12:20)	51.0(12:35)	52.0(12:35)
10/24	48.0(11:20)	46.0(11:10)	46.0(11:20)	52.0(11:30)
10/25	55.0(16:20)	52.0(15:30)	53.0(17:00)	54.0(15:45)
10/26	60.0(16:05)	57.0(14:40)	57.0(16:05)	58.0(14:05)
10/27	55.0(14:05)	53.0(14:25)	52.0(14:05)	54.0(14:35)
10/28	42.0(22:35)	42.0(19:30)	43.0(19:30)	42.0(19:30)
10/29	40.0(1:10)	40.0(6:10)	41.0(3:20)	40.0(3:20)
10/30	38.0(13:50)	35.0(13:50)	36.0(15:15)	36.0(13:50)
10/31	37.0(15:40)	35.0(16:10)	36.0(17:20)	36.0(17:40)

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                 TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  OCT   1-31
                          (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                        NITROGEN OXIDES(NOX)
                                              1-HOUR
SITE               020                                     023

      1 10/ 4( 8:15- 9:15)   64.3        1 10/ 1( 1:05- 2:05)  159.0
      2 10/ 4(18:25-19:25)   45.1        2 10/ 1( 2:45- 3:45)  144.3
      3 10/ 4(10:30-11:30)   44.2        3 10/ 1( 4:50- 5:50)  137.8
      4 10/ 5( 1:00- 2:00)   44.0        4 10/ 7( 0:50- 1:50)   24.8
      5 10/ 4(16:55-17:55)   42.0        5 10/23( 8:50- 9:50)   20.1
-------------------------------------------------------------------------------------------------

                                          NITRIC OXIDE(NO)
                                              1-HOUR
SITE               020                                     023

      1 10/ 6(19:55-20:55)   26.8        1 10/ 1( 1:05- 2:05)  124.5
      2 10/ 6(12:00-13:00)   25.7        2 10/ 1( 2:45- 3:45)  117.6
      3 10/ 5(21:40-22:40)   20.4        3 10/ 1( 4:50- 5:50)  106.4
      4 10/ 6(23:15- 0:15)   20.2        4 10/10(21:05-22:05)   20.0
      5 10/ 5(16:00-17:00)   19.5        5 10/10(22:15-23:15)   19.3
-------------------------------------------------------------------------------------------------

                                       NITROGEN DIOXIDE(NO2)
                                              1-HOUR
SITE               020                                     023

      1 10/ 4( 8:20- 9:20)   55.5        1 10/ 1( 1:10- 2:10)   35.4
      2 10/ 4(18:15-19:15)   42.8        2 10/ 1( 4:50- 5:50)   31.4
      3 10/ 4(10:25-11:25)   42.1        3 10/ 1( 2:45- 3:45)   26.7
      4 10/ 5( 1:15- 2:15)   40.9        4 10/23( 8:50- 9:50)   20.1
      5 10/ 4(23:00- 0:00)   36.4        5 10/23(10:20-11:20)   18.1
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                TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  OCT  1-31
                       (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                        SULFUR DIOXIDE
                                           30-MINUTE
SITE             020                                   021                                         022

      1 10/ 7(16:15-16:45)   64.7      1 10/ 7(13:00-13:30)  269.6      1 10/ 1(13:30-14:00)   11.7
      2 10/ 7(14:50-15:20)   63.8      2 10/ 7(13:35-14:05)  188.9      2 10/ 1(14:20-14:50)    7.4
      3 10/ 7(12:20-12:50)   57.7      3 10/29( 5:20- 5:50)  155.0      3 10/ 1(14:55-15:25)    7.4
      4 10/18(13:10-13:40)   49.9      4 10/29(21:15-21:45)   99.4      4 10/ 2( 0:30- 1:00)    6.5
      5 10/ 7(20:15-20:45)   48.6      5 10/29(22:45-23:15)   95.5      5 10/ 1(23:35- 0:05)    5.1
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SITE             023                                   024

      1 10/ 2(18:40-19:10)   48.6      1 10/23( 3:50- 4:20)   14.8
      2 10/15(15:05-15:35)   43.0      2 10/23( 4:35- 5:05)   14.8
      3 10/ 3( 1:15- 1:45)   42.5      3 10/23( 5:20- 5:50)   14.8
      4 10/15(16:15-16:45)   40.8      4 10/23( 6:05- 6:35)   14.8
      5 10/15(16:50-17:20)   39.9      5 10/23( 6:55- 7:25)   14.8
-------------------------------------------------------------------------------------------------------

                                        SULFUR DIOXIDE
                                            3-HOUR
SITE             020                                   021                                         022

      1 10/ 7(14:10-17:10)   52.3      1 10/ 7(12:30-15:30)  127.0      1 10/ 1(12:55-15:55)    6.9
      2 10/ 7(19:45-22:45)   34.1      2 10/29( 3:40- 6:40)   84.5      2 10/ 1(23:00- 2:00)    5.7
      3 10/ 9( 4:50- 7:50)   16.9      3 10/29(21:10- 0:10)   60.2      3 10/ 1(16:00-19:00)    5.2
      4 10/ 7(22:55- 1:55)   13.6      4 10/28(21:50- 0:50)   29.7      4 10/ 2( 2:05- 5:05)    2.3
      5 10/ 8(20:30-23:30)   11.9      5 10/31(18:25-21:25)   29.4
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SITE             023                                   024

      1 10/15(15:20-18:20)   39.9      1 10/23( 5:15- 8:15)   14.4
      2 10/15(18:25-21:25)   34.1      2 10/23( 8:20-11:20)   14.1
      3 10/11(11:00-14:00)   19.2      3 10/23(22:45- 1:45)   13.0
      4 10/11(15:30-18:30)   18.0      4 10/24( 1:50- 4:50)   12.4
      5 10/11(22:50- 1:50)   17.7      5 10/24( 6:30- 9:30)   11.8
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        TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  OCT  1-31
                  (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                     SULFUR DIOXIDE
                                        24-HOUR
SITE            020                       021                                022

     1 10/ 7-10/ 8(12:00)   20.1    1 10/29-10/30( 1:00)   27.2    1 10/ 1-10/ 2(11:00)    3.7
     2 10/ 8-10/ 9(18:00)    9.3    2 10/ 6-10/ 7(22:00)   16.5
     3 10/16-10/17(12:00)    1.1    3 10/30-10/31( 0:00)    9.6
     4 10/15-10/16(10:00)    1.0    4 10/20-10/21(17:00)    4.9
     5 10/21-10/22(11:00)    0.5    5 10/16-10/17(20:00)    1.5
------------------------------------------------------------------------------------------------

SITE            023                       024

     1 10/11-10/12( 3:00)   17.2    1 10/23-10/24( 2:00)   12.5
     2 10/15-10/16( 1:00)   15.9
     3 10/ 6-10/ 7(13:00)   14.3
     4 10/ 5-10/ 6( 2:00)   11.0
     5 10/13-10/14( 2:00)    2.4
------------------------------------------------------------------------------------------------

                                  HYDROGEN SULFIDE(H2S)
                                        1-HOUR
SITE            020                       021                                022

     1 10/21(11:55-12:55)    3.3    1 10/28(20:00-21:00)  130.9    1 10/ 1( 3:30- 4:30)   14.1
     2 10/19(12:50-13:50)    3.1    2 10/28(21:15-22:15)   85.8    2 10/ 1( 4:35- 5:35)    3.2
     3 10/ 2(23:55- 0:55)    0.7    3 10/20(18:25-19:25)   14.9    3 10/20(21:35-22:35)    3.
     4 10/28(13:40-14:40)    0.3    4 10/22(21:20-22:20)   14.0    4 10/25(14:20-15:20)    2.
                                    5 10/20(16:40-17:40)    6.7    5 10/25(15:25-16:25)    2.
------------------------------------------------------------------------------------------------

SITE            023                       024

     1 10/31(19:05-20:05)  145.3
     2 10/23( 8:50- 9:50)   79.2
     3 10/23(12:50-13:50)   71.0
     4 10/23( 3:40- 4:40)   39.1
     5 10/23( 6:05- 7:05)   20.9
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                         TABLE VI. THE FIVE MAXIMUM AVERAGES FOR  OCT  1-31
                          (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                        TOTAL HYDROCARBON
                                             3-HOUR(6-9AM)
SITE             020                                 023

     1 10/ 7( 6:00- 9:00) 1847.5        1 10/ 1( 6:00- 9:00)18330.8
     2 10/ 6( 6:00- 9:00) 1011.1        2 10/ 2( 6:00- 9:00)16582.9
     3 10/25( 6:00- 9:00)  908.5        3 10/29( 6:00- 9:00)10591.2
     4 10/29( 6:00- 9:30)  881.4        4 10/26( 6:00- 9:00)10195.0
     5 10/15( 6:00- 9:30)  866.0        5 10/27( 6:00- 9:00) 9787.3
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                                             METHANE
                                             3-HOUR(6-9AM)
SITE             020                                 023

     1 10/29( 6:00- 9:00)  792.7        1 10/ 1( 6:00- 9:00)13989.8
     2 10/24( 6:00- 9:00)  783.1        2 10/ 2( 6:00- 9:00)13339.3
     3 10/ 2( 6:00- 9:00)  605.7        3 10/ 7( 6:00- 9:00) 4361.2
                                        4 10/29( 6:00- 9:00)  885.9
                                        5 10/31( 6:00- 9:00)  856.9
------------------------------------------------------------------------------------------

                                      NONMETHANE HYDROCARBON
                                             3-HOUR(6-9AM)
SITE             020                                 023

     1 10/29( 6:00- 9:00)   88.7        1 10/29( 6:00- 9:00) 9705.3
     2 10/24( 6:00- 9:00)   69.7        2 10/26( 6:00- 9:00) 9381.9
                                        3 10/27( 6:00- 9:00) 8960.2
                                        4 10/30( 6:00- 9:00) 7458.4
                                        5 10/31( 6:00- 9:00) 7375.5
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              TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  OCT  1-31
                       (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                          OZONE
                                          1-HOUR
SITE               020                                  023

      1 10/ 1(11:40-12:40)  122.1        1 10/ 2(17:10-18:10)  104.5
      2 10/ 2(14:55-15:55)  115.6        2 10/ 2( 6:55- 7:55)  100.9
      3 10/ 1(12:45-13:45)  115.1        3 10/ 3( 6:05- 7:05)   99.0
      4 10/ 1(13:50-14:50)  113.8        4 10/ 2(22:05-23:05)   96.4
      5 10/15(13:00-14:00)  113.8        5 10/ 2( 1:55- 2:55)   95.2
-----------------------------------------------------------------------------------------

                                      CARBON MONOXIDE
                                          1-HOUR
SITE               020                                  023

      1 10/ 7( 5:50- 6:50) 4483.8        1 10/23( 2:50- 3:50)31420.1
      2 10/ 7( 7:55- 8:55) 4298.8        2 10/ 1( 8:15- 9:15)12439.0
      3 10/ 5( 3:50- 4:50) 2817.2        3 10/ 1(20:30-21:30)11540.9
      4 10/ 5( 1:55- 2:55) 2733.6        4 10/ 4(18:00-19:00)11443.2
      5 10/ 6( 3:50- 4:50) 2231.4        5 10/ 1( 4:50- 5:50)11317.5
-----------------------------------------------------------------------------------------

                                      CARBON MONOXIDE
                                          8-HOUR
SITE               020                                  023

      1 10/ 4(18:55- 2:55) 2023.0        1 10/ 1( 4:55-12:55) 9890.7
      2 10/ 5( 3:55-11:55) 2022.0        2 10/ 4(15:55-23:55) 9125.9
      3 10/ 6( 3:55-11:55) 1942.9        3 10/ 1(19:55- 3:55) 8268.5
      4 10/ 5(18:55- 2:55) 1897.2        4 10/ 2( 4:55-12:55) 6866.9
      5 10/ 4( 4:55-12:55) 1857.4        5 10/ 2(16:55- 0:55) 6581.6
-----------------------------------------------------------------------------------------
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

       NITROGEN OXIDES(NOX)                                                   ATLANTIC RICHFIELD
                           TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                             WIND DIRECTION
                          N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  600      :
                                                                                                      :
 550 -  600     :
                                                                                                      :
 500 -  550     :
                                                                                                      :
 450 -  500     :
                                                                                                      :
 400 -  450     :
                                                                                                      :
 350 -  400     :
                                                                                                      :
 300 -  350     :
                                                                                                      :
 250 -  300     :
                                                                                                      :
 200 -  250     :
                                                                                                      :
 150 -  200     :
                                                                                                      :
 100 -  150     :
                                                                                                      :
  50 -  100     :                     1    1    1         1              1         3    6           :   14

     LT  50     :    60  120   57  112 1512 2198 1116  147  204  231  227  231  616  568  290  234 : 7923

   TOTAL        :    60  120   57  113 1513 2199 1116  148  204  231  228  231  619  574  290  234 : 7937
                ......................................................................................

    MEAN              3.   5.   9.   5.   7.   6.   4.   4.   4.   5.   5.   5.   6.   7.   6.   5.    6.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      NITROGEN OXIDES(NOX)                                                 ATLANTIC RICHFIELD
                             TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                          WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
    GT  600    :                                                                                 :
  550 -  600   :                                                                                 :
  500 -  550   :                                                                                 :
  450 -  500   :                                                                                 :
  400 -  450   :                                                                                 :
  350 -  400   :                                                                                 :
  300 -  350   :                                                                                 :
  250 -  300   :                                                                                 :
  200 -  250   :                                                                                 :
  150 -  200   :                                        3    2    3    4                         :   12
  100 -  150   :              1    1    2    1    3    6    9    6    6    6    1              1 :   43
   50 -  100   :              0    2    1    2    0    1    0    0    0    0    0              0 :    6
     LT  50    :     31   50   33   83   99   73  136  126  201  259  418  153   78   45   55   82 : 1922
    TOTAL      :     31   50   34   86  102   76  139  133  213  267  427  163   79   45   55   83 : 1983
                ..........................................................................................
     MEAN             9.  10.  14.  12.  12.  12.  13.  14.  14.  12.  11.  16.  10.   9.   9.  10.   12.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITRIC OXIDE(NO) ATLANTIC RICHFIELD

TRAILER NO. - 20 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
								WIND DIRECTION									
GT 600																	
550 - 600																	
500 - 550																	
450 - 500																	
400 - 450																	
350 - 400																	
300 - 350																	
250 - 300																	
200 - 250																	
150 - 200																	
100 - 150																	
50 - 100													2	1			3
LT 50	60	120	57	113	1513	2199	1116	148	204	231	228	231	617	573	290	234	7934
TOTAL	60	120	57	113	1513	2199	1116	148	204	231	228	231	619	574	290	234	7937
MEAN	1.	1.	2.	1.	1.	1.	1.	2.	2.	2.	2.	1.	2.	2.	1.	1.	1.

```
                     NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

       NITRIC OXIDE(NO)                                                      ATLANTIC RICHFIELD
                           TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                      WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  600     :                                                                                  :
 550 -  600    :                                                                                  :
 500 -  550    :                                                                                  :
 450 -  500    :                                                                                  :
 400 -  450    :                                                                                  :
 350 -  400    :                                                                                  :
 300 -  350    :                                                                                  :
 250 -  300    :                                                                                  :
 200 -  250    :                                                                                  :
 150 -  200    :                                                                                  :
 100 -  150    :             1    1    2    1    2    5   12    8    9   10    1              1 :    53
  50 -  100    :             0    2    0    0    1    1    0    0    0    0    0              0 :     4
   LT   50     :  31   50   33   83  100   75  136  127  201  259  418  153   78   45   55   82 :  1926
   TOTAL       :  31   50   34   86  102   76  139  133  213  267  427  163   79   45   55   83 :  1983
                 .........................................................................................
   MEAN             5.   7.  13.  10.   8.   7.   7.  10.  10.   8.   7.  11.   6.   7.   8.   8.    8.
```

```
                         NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

          NITROGEN DIOXIDE(NO2)                                                             ATLANTIC RICHFIELD
                                   TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                                        WIND DIRECTION
                       N   NNE   NE   ENE    E  ESE   SE   SSE    S   SSW   SW   WSW    W   WNW   NW   NNW   TOTAL
 CONCENTRATION
   UG/M**3
    GT  600    :                                                                                     :
  550 -  600   :                                                                                     :
  500 -  550   :                                                                                     :
  450 -  500   :                                                                                     :
  400 -  450   :                                                                                     :
  350 -  400   :                                                                                     :
  300 -  350   :                                                                                     :
  250 -  300   :                                                                                     :
  200 -  250   :                                                                                     :
  150 -  200   :                                                                                     :
  100 -  150   :                                                                                     :
   50 -  100   :                              1          1                 1          1     3        :    7
     LT   50   :  60   120    57   113 1513 2198 1116   147   204   231   227   231   618   571   290   234 : 7930
      TOTAL    :  60   120    57   113 1513 2199 1116   148   204   231   228   231   619   574   290   234 : 7937
                 .............................................................................................

       MEAN         2.    4.    8.    4.    5.    4.    4.    2.    3.    3.    4.    4.    4.    5.    5.    4.    4.
```

```
                 NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        NITROGEN DIOXIDE(NO2)                                                 ATLANTIC RICHFIELD
                            TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                      WIND DIRECTION
                      N   NNE   NE  ENE   E  ESE   SE  SSE   S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  500   :                                                                              :
 550 -  600  :                                                                              :
 500 -  550  :                                                                              :
 450 -  500  :                                                                              :
 400 -  450  :                                                                              :
 350 -  400  :                                                                              :
 300 -  350  :                                                                              :
 250 -  300  :                                                                              :
 200 -  250  :                                                                              :
 150 -  200  :                                                                              :
 100 -  150  :                                                                              :
  50 -  100  :                            1    2         1                                  :    4
    LT  50   :       31   50   34   86  101   74  139  132  214  267  426  164   79   44   55   83 : 1979
    TOTAL    :       31   50   34   86  102   76  139  133  214  267  426  164   79   44   55   83 : 1983
                 ...........................................................................................
      MEAN             3.   3.   1.   2.   3.   5.   3.   5.   5.   4.   4.   5.   3.   3.   1.   2.   4.
```

```
                   NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        TOTAL HYDROCARBONS                                                    ATLANTIC RICHFIELD
                            TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                      WIND DIRECTION
                   N   NNE   NE   ENE   E  ESE   SE  SSE   S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT 6000    :                                                                             :
 5400 - 6000  :                                                                             :
 4800 - 5400  :                                                                             :
 4200 - 4800  :                                                                             :
 3600 - 4200  :                                                                             :
 3000 - 3600  :                                                                             :
 2400 - 3000  :                            1    2                                2    1     :    6
 1800 - 2400  :                       3   26   11                           1    2    0     :   43
 1200 - 1800  :         4             6   17    6                  1    1   0    0    0     :   35
  600 - 1200  :   22   42   16   29  309  574  285   41   42   64   46   67  196  135  108   70 : 2047
   LT 600     :   12   23    8   17  218  344  175   22   23   35   25   37  111   77   60   39 : 1226
   TOTAL      :   34   69   24   46  536  962  479   63   65   99   72  105  308  217  169  109 : 3357
                ....................................................................................
   MEAN          522. 567. 562. 538. 538. 589. 586. 552. 551. 527. 543. 538. 528. 553. 535. 513. 560.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

TOTAL HYDROCARBONS

ATLANTIC RICHFIELD

TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 6000	7	17	23	30	40	29	44	40	36	61	101	45	13	16	21	33	556
5400 - 6000	0	0	0	0	1	1	1	3	1	0	0	0	0	0	1	0	8
4800 - 5400	1	0	0	1	0	1	1	0	0	1	1	0	0	0	0	0	6
4200 - 4800	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3600 - 4200	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4
3000 - 3600	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
2400 - 3000	0	0	0	0	1	1	3	2	1	1	0	0	1	0	0	0	10
1800 - 2400	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	3
1200 - 1800	0	0	0	0	0	0	3	0	0	0	1	0	0	0	1	0	5
600 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 600	0	0	0	0	0	158	0	0	0	0	0	0	0	158	0	0	316
TOTAL	8	17	23	33	44	191	56	45	38	63	104	46	14	174	23	33	912
MEAN/100	163.	193.	173.	161.	153.	25.	127.	146.	154.	167.	163.	173.	169.	17.	178.	191.	105.

```
                 NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

       METHANE(CH4)                                                           ATLANTIC RICHFIELD
                            TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                      WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  CONCENTRATION
    UG/M**3
    GT 6000    :                                                                               :
 5400 - 6000   :                                                                               :
 4800 - 5400   :                                                                               :
 4200 - 4800   :                                                                               :
 3600 - 4200   :                                                                               :
 3000 - 3600   :                                                                               :
 2400 - 3000   :                                                                 1    1        :    2
 1800 - 2400   :                                                                 0    0        :    0
 1200 - 1800   :          2                                            1         0    0        :    3
  600 - 1200   :     13   27    8   16  155  206   97   15   14   11    9   15   65   59   62   38 :  810
     LT 600    :      7   15    4   12  140  147   72    8    7    6    6    8   40   38   35   21 :  566
      TOTAL    :     20   44   12   28  295  353  169   23   21   17   15   24  105   98   98   59 : 1381
                 ........................................................................................

      MEAN         545. 548. 548. 507. 474. 488. 489. 553. 570. 513. 499. 563. 509. 507. 524. 492. 498.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

METHANE(CH4) ATLANTIC RICHFIELD

TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 6000	:	6	17	23	30	32	22	28	30	29	61	101	43	11	13	20	31	:	497
5400 - 6000	:	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	:	2
4800 - 5400	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:	0
4200 - 4800	:	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	:	1
3600 - 4200	:	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	:	1
3000 - 3600	:	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:	1
2400 - 3000	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:	0
1800 - 2400	:	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	:	1
1200 - 1800	:	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	:	3
600 - 1200	:	18	23	8	39	39	25	77	65	104	105	249	99	53	25	21	39	:	989
LT 600	:	3	4	1	6	6	4	13	12	18	19	44	18	9	4	3	9	:	173
TOTAL	:	28	44	32	75	79	51	118	107	152	186	396	161	74	42	44	79	:	1668
MEAN/100		35.	55.	100.	57.	61.	63.	38.	44.	32.	49.	39.	41.	28.	46.	63.	59.		45.

CORPORATION

```
                       NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        NON-METHANE HYDROCARBONS                                                   ATLANTIC RICHFIELD
                                 TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                            WIND DIRECTION
                          N   NNE   NE   ENE    E  ESE    SE   SSE    S   SSW   SW   WSW    W   WNW   NW  NNW  TOTAL
   CONCENTRATION
     UG/M**3
     GT 6000     :                                                                                       :

 5400 - 6000     :                                                                                       :

 4800 - 5400     :                                                                                       :

 4200 - 4800     :                                                                                       :

 3600 - 4200     :                                                                                       :

 3000 - 3600     :                                                                                       :

 2400 - 3000     :                                                                                       :

 1800 - 2400     :                                                                                       :

 1200 - 1800     :                              1                                  1                     :     2

  600 - 1200     :                         1    1                         1        1                     :     4

     LT 600      :       20    45    12    28  293  350  169    23    21    17   14    25  102    98   98   59 : 1374

     TOTAL       :       20    45    12    28  294  352  169    23    21    17   15    25  104    98   98   59 : 1380
                    ....................................................................................................

     MEAN                34.   27.   38.   29.  30.  29.  33.   56.   58.   35.  91.   21.  41.   35.  31.  29.   33.
```

```
                     NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

          NON-METHANE HYDROCARBONS                                                      ATLANTIC RICHFIELD
                              TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                            WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
CONCENTRATION
  UG/M**3
  GT 6000    :        4   10    5    9    7    4    7    4    9   19   24   13    4    7   13   12 :   151
5400 - 6000  :        0    2    1    4    2    1    2    4    2    2    8    3    1    1    1    4 :    38
4800 - 5400  :        2    1    4    1    1    2    2    2    1    3   11    3    1    3    3    2 :    42
4200 - 4800  :        0    2    2    3    4    0    2    3    0    3    6   10    1    0    0    8 :    44
3600 - 4200  :        0    2    2    2    3    1    0    1    1    2    2    1    1    1    1    4 :    24
3000 - 3600  :        1    0    1    1    2    1    3    1    3    8    5    3    1    0    0    0 :    30
2400 - 3000  :        0    0    1    2    1    1    2    1    1    2    3    1    1    0    0    0 :    16
1800 - 2400  :        0    0    1    1    1    1    1    0    0    3    0    0    0    0    1    0 :     9
1200 - 1800  :        0    0    0    2    1    1    2    2    2    2    1    0    0    1    0    1 :    15
 600 - 1200  :        0    0    0    0    0    2    0    1    0    0    1    1    0    0    0    0 :     5
   LT  600   :        0    0   11    9   23   17   13   24   15   33   79   18    3    0    1    0 :   246
    TOTAL    :        7   17   28   34   45   31   34   43   34   77  140   53   13   13   20   31 :   620
            ..............................................................................................

  MEAN/100          59.  65.  30.  38.  25.  19.  31.  23.  30.  29.  25.  37.  40.  64.  62.  57.   33.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIOXIDE(SO2) ATLANTIC RICHFIELD
TRAILER NO. - 20 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 700																	
650 - 700																	
600 - 650																	
550 - 600																	
500 - 550																	
450 - 500																	
400 - 450																	
350 - 400																	
300 - 350																	
250 - 300																	
200 - 250													1				1
150 - 200													0				0
100 - 150												1	0	1			2
50 - 100					2	3	1	1				3	10	11	1		32
LT 50	57	119	55	114	1460	2086	1125	175	223	219	209	216	542	534	297	232	7663
TOTAL	57	119	55	114	1462	2089	1126	176	223	219	209	220	553	546	298	232	7698
MEAN	1.	1.	1.	0.	1.	1.	1.	1.	1.	1.	0.	3.	2.	3.	1.	0.	1.

```
                  NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         SULFUR DIOXIDE(SO2)                                          ATLANTIC RICHFIELD
                          TRAILER NO. -  21  PERIOD(10/ 1/74 TO 10/31/74)

                                                    WIND DIRECTION
                      N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700     :                                                                                               :
 650 -  700    :                                                                                               :
 600 -  650    :                                                                                               :
 550 -  600    :                                                                                               :
 500 -  550    :                                                                                               :
 450 -  500    :                                                                                               :
 400 -  450    :                                                                                               :
 350 -  400    :                                                                                               :
 300 -  350    :                                                                                               :
 250 -  300    :          2           1                 3                       1     1           1     5     2 :    16
 200 -  250    :          0           0                 0                       0     1           0     0     1 :     2
 150 -  200    :          0           0           3     1                       1     0           0     0     0 :     5
 100 -  150    :          0     1     0     2     4     2     1     1           0     0     1     1     0     2 :    15
  50 -  100    :    2     1     0     1     0     2     4     4     0           0     2     1     3     4     1 :    25
    LT   50    :  172   134    71    61   235   998  1605  1103   538   173   135   107   118   232   517   919 :  7048
     TOTAL     :  174   137    72    63   237  1007  1615  1108   539   173   137   111   120   237   526   925 :  7111
               ...........................................................................................................
      MEAN          2.    5.    2.    6.    3.    3.    1.    1.    2.    1.    3.    6.    2.    3.    3.    1.     2.
```

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                NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      SULFUR DIOXIDE(SO2)                                                   ATLANTIC RICHFIELD
                           TRAILER NO. -  22  PERIOD(10/ 1/74 TO 10/31/74)

                                                        WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  700     :                                                                                :
 650 -  700    :                                                                                :
 600 -  650    :                                                                                :
 550 -  600    :                                                                                :
 500 -  550    :                                                                                :
 450 -  500    :                                                                                :
 400 -  450    :                                                                                :
 350 -  400    :                                                                                :
 300 -  350    :                                                                                :
 250 -  300    :                                                                                :
 200 -  250    :                                                                                :
 150 -  200    :                                                                                :
 100 -  150    :                                                                                :
  50 -  100    :                                                                                :
   LT   50     :   6   16    8   21  243  424   49   31   11   13   19   52   97   64   16   10 : 1080
   TOTAL       :   6   16    8   21  243  424   49   31   11   13   19   52   97   64   16   10 : 1080
                ..................................................................................
   MEAN            1.   1.   2.   2.   0.   1.   0.   0.   0.   0.   1.   2.   2.   1.   1.   1.   1.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIOXIDE(SO2) ATLANTIC RICHFIELD
TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3								WIND DIRECTION									
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 700 :																	:
650 - 700 :																	:
600 - 650 :																	:
550 - 600 :																	:
500 - 550 :																	:
450 - 500 :																	:
400 - 450 :																	:
350 - 400 :																	:
300 - 350 :																	:
250 - 300 :																	:
200 - 250 :																	:
150 - 200 :																	:
100 - 150 :	1				1												: 2
50 - 100 :	0				1					3	2						: 6
LT 50 :	46	73	62	89	129	136	215	246	363	628	649	242	126	97	153	207	: 3461
TOTAL :	47	73	62	89	131	136	215	246	363	631	651	242	126	97	153	207	: 3469
MEAN	4.	3.	2.	1.	3.	2.	2.	2.	2.	1.	1.	2.	1.	2.	1.	1.	2.

```
                  NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

          SULFUR DIOXIDE(SO2)                                                      ATLANTIC RICHFIELD
                               TRAILER NO. -  24  PERIOD(10/ 1/74 TO 10/31/74)

                                                               WIND DIRECTION
                      N  NNE   NE  ENE   E  ESE   SE  SSE   S  SSW   SW  WSW   W  WNW   NW  NNW  TOTAL
  CONCENTRATION
    UG/M**3
    GT  700    :                                                                                 :
 650 -  700    :                                                                                 :
 600 -  650    :                                                                                 :
 550 -  600    :                                                                                 :
 500 -  550    :                                                                                 :
 450 -  500    :                                                                                 :
 400 -  450    :                                                                                 :
 350 -  400    :                                                                                 :
 300 -  350    :                                                                                 :
 250 -  300    :                                                                                 :
 200 -  250    :                                                                                 :
 150 -  200    :                                                                                 :
 100 -  150    :                                                                                 :
  50 -  100    :                                                                                 :
    LT   50    :                                                                                 :
    TOTAL      :      0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                .........................................................................................
     MEAN             0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    0.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         HYDROGEN SULFIDE(H2S)                                                    ATLANTIC RICHFIELD
                                TRAILER NO. -  20  PERIOD(10/ 1/74 TO 10/31/74)

                                                              WIND DIRECTION
                   N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  140    :                                                                                :
130 -  140    :                                                                                :
120 -  130    :                                                                                :
110 -  120    :                                                                                :
100 -  110    :                                                                                :
 90 -  100    :                                                                                :
 80 -   90    :                                                                                :
 70 -   80    :                                                                                :
 60 -   70    :                                                                                :
 50 -   60    :                                                                                :
 40 -   50    :                                                                 1              :     1
 30 -   40    :                                                                 0              :     0
 20 -   30    :                                                                 0    1         :     1
 10 -   20    :                                                                 0    0         :     0
   LT   10    :   65  133   67   97 1547 2229 1181  154  203  221  221  245  707  649  337  251 :  8307
   TOTAL      :   65  133   67   97 1547 2229 1181  154  203  221  221  246  708  649  337  251 :  8329
              ......................................................................................
    MEAN          0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.     0.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      HYDROGEN SULFIDE(H2S)                                                       ATLANTIC RICHFIELD
                           TRAILER NO. -  21  PERIOD(10/ 1/74 TO 10/31/74)

                                                                   WIND DIRECTION
                          N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
    GT  140     :                                                                                    :
 130 -  140     :                               1                      1                             :    2
 120 -  130     :                               0                      0                             :    0
 110 -  120     :                               1                      0                             :    1
 100 -  110     :                               0                      0                             :    0
  90 -  100     :                               0                      0                             :    0
  80 -   90     :                               1                      0                             :    1
  70 -   80     :                               0    1                 0                             :    1
  60 -   70     :                               1    0                 0                             :    1
  50 -   60     :                               1    0                 0                             :    1
  40 -   50     :                          1    0    2         1       0                             :    4
  30 -   40     :                          0    1    1    2    0       0                             :    4
  20 -   30     :                          0    6    0    1    0       0    1                        :    8
  10 -   20     :        1                 1    5    2    3    0       0    0         1           1 :   14
    LT   10     :  173  139   73   63  237 1033 1590 1100  531  171  133  110  119  236  524  920 : 7082
     TOTAL      :  173  140   73   63  237 1035 1607 1106  537  172  134  111  119  237  524  921 : 7119
                ••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••••
     MEAN           0.   0.   0.   0.   0.   0.   1.   0.   0.   0.   1.   0.   0.   0.   0.   0.    0.
```

```
                        NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        HYDROGEN SULFIDE(H2S)                                                      ATLANTIC RICHFIELD
                                  TRAILER NO. -  22  PERIOD(10/ 1/74 TO 10/31/74)

                                                        WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  140    :                                                                                   :
 130 -  140    :                                                                                   :
 120 -  130    :                                                                                   :
 110 -  120    :                                                                                   :
 100 -  110    :                                                                                   :
  90 -  100    :                                                                                   :
  80 -   90    :                                                                                   :
  70 -   80    :                                                                                   :
  60 -   70    :                                                                                   :
  50 -   60    :                                                                                   :
  40 -   50    :                                                                                   :
  30 -   40    :                           1                                                       :     1
  20 -   30    :                           4                                                       :     4
  10 -   20    :                           5                                                       :     5
   LT   10    :   24   62   69  202  680 1289  170   77   38   39   49  115  315  254   64   47 :  3494
   TOTAL      :   24   62   69  202  690 1289  170   77   38   39   49  115  315  254   64   47 :  3524
               ......................................................................................
   MEAN             1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.    1.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         HYDROGEN SULFIDE(H2S)                                                   ATLANTIC RICHFIELD
                               TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                           WIND DIRECTION
                        N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
 CONCENTRATION
   UG/M**3
   GT  140     :                                                                                 :
 130 -  140    :                                                                                 :
 120 -  130    :                                                                                 :
 110 -  120    :                                                                                 :
 100 -  110    :                                                                                 :
  90 -  100    :                                                                                 :
  80 -   90    :                                                                                 :
  70 -   80    :                                                                                 :
  60 -   70    :                                                                                 :
  50 -   60    :                                                                                 :
  40 -   50    :                                                                                 :
  30 -   40    :                                                                                 :
  20 -   30    :                                                       2                         :     2
  10 -   20    :                     1                1                0                     1   :     3
   LT   10     :       11   19   27  267 1054 1813   69   60   70  205  309   91   41   32   35   42 :  4145
    TOTAL      :       11   19   27  268 1054 1813   70   60   70  205  311   91   41   32   35   43 :  4150
                ........................................................................................
    MEAN                0.   0.   0.   1.   1.   1.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    1.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        HYDROGEN SULFIDE(H2S)                                                    ATLANTIC RICHFIELD
                          TRAILER NO. -  24  PERIOD(10/ 1/74 TO 10/31/74)

                                                  WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  140    :                                                                                :

130 -  140    :                                                                                :

120 -  130    :                                                                                :

110 -  120    :                                                                                :

100 -  110    :                                                                                :

 90 -  100    :                                                                                :

 80 -   90    :                                                                                :

 70 -   80    :                                                                                :

 60 -   70    :                                                                                :

 50 -   60    :                                                                                :

 40 -   50    :                                                                                :

 30 -   40    :                                                                                :

 20 -   30    :                                                                                :

 10 -   20    :                                                                                :

  LT   10     :                                                                                :

   TOTAL      :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
               .........................................................................................

    MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

CARBON MONOXIDE(CO)
ATLANTIC RICHFIELD
TRAILER NO. - 20 PERIOD(10/ 1/74 TO 10/31/74)

	WIND DIRECTION																
CONCENTRATION, UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 2400		1	1	1	21	49	14	2				1	8	8	3	3	112
1800 - 2400	1	1	2	13	42	16	19	2	1	4	3	4	38	12	9	2	169
1600 - 1800	1	4	2	7	24	46	29	28	27	25	23	11	16	18	2	2	265
1400 - 1600	1	4	2	6	96	77	36	2	19	23	6	10	20	26	13	6	347
1200 - 1400	0	0	3	4	20	16	17	0	1	0	0	2	9	18	9	11	110
1000 - 1200	0	0	0	0	1	0	1	0	0	0	1	0	1	1	1	0	6
800 - 1000	1	0	1	0	6	15	16	1	2	12	15	8	0	5	0	1	83
600 - 800	7	8	2	5	94	123	141	13	19	21	32	25	112	78	30	26	736
400 - 600	7	19	2	12	188	298	80	1	0	0	1	3	87	31	21	34	784
200 - 400	0	0	0	0	1	2	1	0	1	0	0	1	1	2	0	0	9
LT 200	42	75	8	16	125	310	235	92	32	25	8	58	83	141	185	50	1485
TOTAL	60	112	23	64	618	952	589	141	102	110	89	123	375	340	273	135	4106
MEAN/100	3.	3.	9.	10.	8.	7.	6.	5.	9.	10.	10.	6.	8.	6.	3.	6.	7.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

CARBON MONOXIDE(CO) ATLANTIC RICHFIELD
TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3										WIND DIRECTION							
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 2000 :	11	21	18	47	49	34	61	46	58	105	201	89	34	24	28	39 :	865
1800 - 2000 :	1	1	1	1	3	1	1	6	11	9	13	10	4	3	0	2 :	67
1600 - 1800 :	2	4	1	5	2	6	3	9	7	16	23	5	7	1	2	6 :	99
1400 - 1600 :	6	7	4	4	7	3	11	6	12	18	30	15	14	4	7	9 :	157
1200 - 1400 :	4	2	4	14	16	7	36	33	45	41	82	31	9	4	4	4 :	336
1000 - 1200 :	0	1	1	0	1	2	3	1	3	3	13	8	0	1	0	2 :	39
800 - 1000 :	0	2	0	1	0	0	0	0	1	1	0	0	0	0	0	1 :	6
600 - 800 :	1	1	1	0	0	0	0	1	1	0	1	0	0	0	0	1 :	7
400 - 600 :	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1 :	3
200 - 400 :	0	1	0	0	1	1	0	1	1	1	4	1	0	1	0	1 :	13
LT 200 :	0	15	0	0	15	15	16	32	15	15	79	15	0	15	0	15 :	247
TOTAL :	25	55	30	72	94	69	131	135	154	209	447	175	68	53	41	81 :	1839
MEAN/100	34.	27.	51.	44.	35.	50.	31.	31.	32.	44.	32.	38.	29.	30.	46.	36.	36.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

OZONE(03) ATLANTIC RICHFIELD

TRAILER NO. - 20 PERIOD(10/ 1/74 TO 10/31/74)

CONCENTRATION UG/M**3		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 160	:					1									1			:	2
150 - 160	:					0									0			:	0
140 - 150	:					0									0			:	0
130 - 140	:					0									0			:	0
120 - 130	:	1				0								1	3	2	1	:	8
110 - 120	:	0	1		2	0			2	15	16	7	10	17	12	14	12	:	108
100 - 110	:	3	4		3	8	1		2	11	8	11	17	56	65	59	36	:	284
90 - 100	:	6	13	4	2	12	6	3	9	16	20	18	8	80	78	35	42	:	352
80 - 90	:	8	20	11	1	18	23	26	7	7	19	29	25	68	44	17	21	:	344
70 - 80	:	3	7	3	9	73	68	56	5	3	5	12	17	95	60	9	10	:	435
60 - 70	:	13	13	6	6	86	106	74	10	5	10	5	21	54	32	18	22	:	481
50 - 60	:	6	12	2	15	153	186	67	7	31	19	14	11	7	12	12	10	:	564
LT 50	:	11	42	34	90	1383	2160	1094	148	147	133	122	111	141	227	114	32	:	5989
TOTAL	:	51	112	60	128	1734	2550	1320	190	235	230	218	220	519	534	280	186	:	8567
MEAN		54.	51.	37.	26.	22.	19.	21.	30.	40.	45.	47.	50.	66.	56.	60.	76.		31.

```
                         NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        OZONE(O3)                                                                  ATLANTIC RICHFIELD
                              TRAILER NO. -  23  PERIOD(10/ 1/74 TO 10/31/74)

                                                         WIND DIRECTION
                      N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW   TOTAL
CONCENTRATION
  UG/M**3
   GT  160   :                                1                       1                                              :     2

 150 - 160   :                                0                       0                             1                :     1

 140 - 150   :        1                       0                       0                             0           1    :     2

 130 - 140   :        0                       0                       0                       1     0           0    :     1

 120 - 130   :        0                       1                       0           3     0     0           0    :     4

 110 - 120   :        0                       0                       0           0     0     0           0    :     0

 100 - 110   :        0                       0                 1     0           3     0     0           0    :     4

  90 - 100   :        2     7    10     9    16    11     9    13     4     4    22    13     2     2     4     3 :   131

  80 -  90   :        4     7    12    19    16    11    19    15    21    35    55    28     8     4    10    10 :   274

  70 -  80   :        0     3     0     0     0     0     0     0     0     6    14     1     0     6     5    17 :    52

  60 -  70   :        0     0     0     0     0     0     0     0     1     3     0     1     0     0     0     0 :     5

  50 -  60   :        0     0     0     1     0     0     0     0     2     6     2     1     1     2     0     0 :    15

    LT  50   :       15    13     4    35    23    23    63    59    92   139   197    67    11     6     4    27 :   778

     TOTAL   :       22    30    25    64    57    45    91    88   121   193   296   112    23    20    24    57 :  1269
                 ...................................................................................................

      MEAN           39.   56.   80.   49.   63.   53.   39.   39.   38.   36.   41.   44.   55.   60.   73.   46.    44.
```

TABLE VIII

DIURNAL VARIATION OF ALL RECORDED PARAMETERS

DIURNAL VARIATION OF NITROGEN OXIDES(UG/M**3)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	9	10	9	10	*	9	*	10	11	10	10	10	10	10	9	10	12	13	12	16	11	12	9	10	11.
2	11	9	10	9	10	9	10	13	13	12				*	*	*	*	*	10	10	10	*	*	*	9.
3	*	*	*	9	*	*	*	9	*	9	9	11		19	15	19	17	14	18	16	18	19	17	16	12.
4	21	19	14	39	35	36	35	46	62	50	43	41	38	35	36	38	34	41	41	38	36	37	38	37	38.
5	38	42	42								11	14		11		12	12	10	15	15					24.
6	15			*	*	*	15	16	18	17	19	15	25	13	13	17	18	16	17	19	31	21	25	18	17.
7	20	17	14	*	*	*	*	*	23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
8	*	*	*	*	*	*	*	10	13	*	*	*	*	*	*	*	*	*	*	9	13	12	9	*	5.
9	9	*	*	*	*	*	*	*	18	*	*	9	*	*	*			9	11	13	16	13	14	14	9.
10	15	13	14	13	14	15	17	16	20	18	15	16	14	14	15	16	14	14	15	19	20	16	15	17	16.
11	18	16	15	15	16	15	18	19	22	18	17	18	16	16	19	21	23	17	14	13	14	17	16	20	18.
12	18	17	16	16	17	19	19	19	21	19	18	18	17	17	17	18	17	17	17	19	17	19	18	19	18.
13	20	19	17	18	18	17	18	20	23	19	18	19	19	15	16	17	16	17	18	20	18	17	17	17	18.
14	18	18	18	17	19	18	19	20	23	21	16	13	16	15	15	14	14	15	16	16	17	15	17	16	17.
15	17	16	15	15	16	16	16	17	19	16	18	17	15	13	13	12	13	16	18	13	*	*	*	*	14.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	*	12	10	13	11	11	7.
17	10	*	*	*	*	*	15	9	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7.
18	*	*	*	*	*	*	9	*	*	*				*		*	*	*	*	*	*	*	*	*	3.
19	*	*	*	11	10	11	14	15	19	15	16	17	15	15	13	11	11	13	12	11	11	10	9	12	12.
20	11	10	12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
21	*	*	*	9	*	*	*	*	*	*	*	*	*												2.
22																									
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9	9	9	9	3.
29	*	*	9	*	*	*	*	9	*	*	*		*	*	*	*									8.
30	*	*	9	*	*	*	*	*	*	10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	4.
MEAN	10.	9.	9.	8.	8.	8.	9.	10.	13.	10.	9.	9.	9.	9.	9.	9.	9.	9.	10.	10.	10.	9.	9.	9.	

TOTAL NUMBER OF OBSERVATIONS = 7872. MEAN = 9.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

```
                     DIURNAL VARIATION OF NITROGEN OXIDES(UG/M**3)
                      TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                 HOUR
        1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 MEAN
DAY

 1    112  156  136  148       136   17   16   14   14   14   14   13   14   14   14   15    *              *    *   12   14  43.
 2     15   17   15   16   18   17   17   18   17   16   16   17   16   15   16             13   13   14   15   15   15   16  16.
 3     16   15   15   17   16   16   16                                                                                      16.
 4
 5
 6
 7      *   21    *    9   10   11    *    *    *   11                             *    *    *    *    *    *    *    *    *   5.
 8
 9
10                                                                                     18   18   18   18   18   20   19   19  19.
11
12
13
14
15
16
17
18                                                                                          *    *    *    *    *    *    *   6.
19      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   7.
20      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   7.
21      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   7.
22      *    *    *    *    *    *    *    *    *    *    *    *    *    *    9    *    *    *    *    *    *    *    *    *   7.
23      *    *    *   24    *    *    *    *   16   16    *   10    *   12        10    9    *    *    *    *    *    *    *   8.
24      *    *    *    *    *    *    *    *    *    *    *    *                                                              2.
25                                                                                          *    *    *    *    *    *    *   0.
26      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0.
27      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *                  0.
28                                                                                               14   13   13   12   15   13  14.
29     13   13   13   14   13   13   13   13   13   12   13   13   13   13   12   76   34    *    *    *    *    *    *    *  12.
30      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0.
31      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0.

MEAN   14.  17.  15.  16.   7.  16.   7.   6.   7.   7.   6.   7.   6.   7.   6.  10.   7.   5.   5.   5.   5.   6.   6.   6.

                 TOTAL NUMBER OF OBSERVATIONS =  4052   MEAN  =    8.

           * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
	HOUR																								
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
2	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	*	1.
3	*	*	*	*	*	*	*	*	*	*	*	10		19	15	18	17	13	14	16	16	17	13	15	9.
4	12	19	13	*	*	*	12	9	11	*	*	*	*	*	10	*	9	*	*	*	*	*	*	*	7.
5	*	*	*								11	14		11		12	12	10	15	15					10.
6	15			*	*	*	11	14	9	12	13	9	21	13	12	17	18	16	14	18	26	17	18	17	15.
7	15	12	13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	1.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*	*	*				*		*	*	*	*	*	*	*	*	*	0.
19	*	*	*	11	10	10	13	12	17	14	15	16	14	15	12	11	11	13	12	10	10	9	*	11	11.
20	9	10	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
21	*	*	*	9	*	*	*	*	*	*	*	*	*												2.
22																									
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*									2.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	1.
MEAN	2.	2.	2.	1.	2.	2.	2.	2.	3.	2.	2.	2.	2.	3.	2.	2.	3.	2.	2.	2.	2.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 7872 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	100	124	110	119		105	17	16	14	14	14	14	13	13	14	14	15	*			*	*	12	14	37
2	15	17	15	16	18	17	14	18	17	15	16	17	16	14	16			13	13	14	15	15	15	16	16
3	16	15	15	15	16	15	16																		16
4																									
5																									
6																									
7	*	17	*	*	*	*	*	*	*	*						*	*	*	*	*	*	*	*	*	3
8																									
9																									
10																	18	18	18	18	18	20	19	19	19
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																		*	*	*	*	*	*	*	3
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	1
24	*	*	*	*	*	*	*	*	*	*	*	*													0
25																		*	*	*	*	*	*	*	0
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				0
28																			*	*	*	*	*	*	0
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
MEAN	10.	13.	11.	11.	4.	11.	4.	3.	3.	3.	3.	3.	3.	3.	3.	2.	3.	3.	3.	3.	3.	4.	4.	4.	

TOTAL NUMBER OF OBSERVATIONS = 4046 MEAN = 5.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	9	10	9	9	*	9	*	10	10	10	10	10	10	9	*	9	11	12	11	14	10	12	9	9	10.
2	11	9	10	9	10	9	9	13	12	11				*	*	*	*	*	*	9	10	*	*	*	9.
3	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	2.
4	*	*	*	33	32	31	23	37	51	42	40	34	34	30	25	35	24	39	39	36	34	35	30	36	31.
5	32	37	37								*	*		*		*	*	*	*	*					14.
6	*			*	*	*	*	*	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
7	*	*	*	*	*	*	*	*	21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
8	*	*	*	*	*	*	*	10	13	*	*	*	*	*	*	*	*	*	*	*	10	12	9	*	4.
9	*	*	*	*	*	*	*	*	17	*	*	*	*	*	*			9	11	12	16	13	14	13	8.
10	14	12	13	13	13	13	16	15	19	18	14	15	13	13	14	16	14	13	14	18	20	15	15	17	15.
11	17	16	15	14	16	15	17	18	19	16	15	17	15	14	18	20	21	16	13	12	13	16	16	19	17.
12	17	16	15	14	15	16	16	17	17	15	16	16	15	15	16	17	16	15	16	16	15	16	15	15	16.
13	16	16	15	14	14	15	15	16	16	15	13	16	18	14	15	15	15	16	16	18	17	16	16	16	16.
14	16	16	16	15	18	17	18	16	17	16	16	12	15	13	14	12	13	12	15	14	16	15	16	15	16.
15	16	15	14	15	14	16	15	17	17	15	16	16	14	13	13	12	13	15	18	13	*	*	*	*	13.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	*	12	10	13	11	11	7.
17	10	*	*	*	*	*	15	9	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7.
18	*	*	*	*	*	*	9	*	*	*				*		*	*	*	*	*	*	*	*	*	3.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
21	*	*	*	*	*	*	*	*	*	*	*	*	*												1.
22																									
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	9	*	*	*	2.
29	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*									5.
30	*	*	*	*	*	*	*	*	*	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	2.
MEAN	7.	7.	7.	7.	6.	6.	7.	8.	10.	8.	7.	7.	7.	6.	6.	6.	6.	7.	7.	8.	8.	8.	7.	7.	

TOTAL NUMBER OF OBSERVATIONS = 7872 MEAN = 7.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                     DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
                      TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                         HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1      12  32  26  28      30   *   *   *   *   *   *   *   *   *   *   *   *           *   *   *   *   6.
  2       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *           *   *   *   *   *   *   *   0.
  3       *   *   *   *   *   *   *                                                                       0.
  4
  5
  6
  7       *   *   *   *   *   *   *   *   *   *                       *   *   *   *   *   *   *   *   *   2.
  8
  9
 10                                                                       *   *   *   *   *   *   *   *   0.
 11
 12
 13
 14
 15
 16
 17
 18                                                                           *   *   *   *   *   *   *   4.
 19       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   5.
 20       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   5.
 21       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   3.
 22       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   3.
 23       *   *   *  23   *   *   *   *  16  16   *  10   *  12      10   9   *   *   *   *   *   *   *   7.
 24       *   *   *   *   *   *   *   *   *   *   *   *                                                   2.
 25                                                                           *   *   *   *   *   *   *   0.
 26       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 27       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *               0.
 28                                                                               14  13  13  12  15  13  14.
 29      13  13  13  14  13  13  13  13  13  12  13  13  13  13  12  14   *   *   *   *   *   *   *   *   9.
 30       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 31       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.

 MEAN    4.  5.  5.  5.  3.  5.  3.  3.  4.  4.  3.  4.  3.  4.  3.  3.  2.  2.  2.  2.  2.  2.  2.  2.

                 TOTAL NUMBER OF OBSERVATIONS =  4046    MEAN  =    3.

         * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                 TRAILER NO. - 20  PERIOD(10/ 1/74 TO 10/31/74)

                                                HOUR
       1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24  MEAN
DAY

  1    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  2    *    *    *    *    *    *    *    *    *    *                   *    *    *    *    *    *    *    *    *    *    *    0.
  3    *    *    *         *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  4
  5
  6
  7                   *    *    *    *    *    *    *    *    *   40   39   41   55   57   27   13   18   41   21   18    *   19.
  8   19    *    *    *    *    *    *    *    *    *    *   13    *    *    *    *    *    *    *    *    *   20    *    *    6.
  9    *    *    *   13   13   14   14   20    *   13    *    *    *    *    *              *    *    *    *    *    *    *    7.
 10    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 11    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 12    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 13    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 14    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 15    *    *    *    *    *    *    *    *    *    *    *    *   17    *    *    *    *    *    *    *    *    *    *    *    1.
 16    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 17    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 18    *    *    *    *    *    *    *    *    *    *                  27         *    *    *    *    *    *    *    *    *    1.
 19    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 20    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 21    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    1.
 22    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 23    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 24    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 25    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *    *    0.
 26    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 27    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 28    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 29    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *                                            0.
 30    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 31    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *    0.

MEAN  1.   1.   1.   1.   1.   1.   1.   1.   0.   1.   1.   1.   3.   3.   2.   2.   2.   1.   1.   1.   2.   2.   1.   1.

                      TOTAL NUMBER OF OBSERVATIONS =  7698     MEAN  =   1.

       * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                    DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                     TRAILER NO. - 21  PERIOD(10/ 1/74 TO 10/31/74)

                                                       HOUR
        1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24  MEAN
DAY

  1     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  2     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  3     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  4     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  5     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  6     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  7     *    *    *    *    *    *    *    *    *    *    *    *  106  266    *    *    *    *    *    *    *    *    *    *   16.
  8     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  9     *    *    *    *    *    *    *    *    *    *                             *    *    *    *    *    *    *    *    *    0.
 10     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 11     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 12     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 13     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 14     *    *    *    *    *    *    *    *    *    *    *                                                   *    *    0.
 15     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 16     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 17     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *                                  2.
 18                                                                                                                        *    0.
 19     *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 20     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *         *   31   32    3.
 21    25    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 22     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 23     *    *    *   22    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    1.
 24     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 25     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 26     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 27     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 28     *    *    *                                                        *    *    *    *    *    *    *    *    *         2.
 29     *    *    *   62   79  124   41   39   24   14    *    *    *    *    *   26   24    *    *    *    *   52   42   69   26.
 30                    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 31     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   23   29   28   26   30   26   29   28   10.

MEAN   1.   1.   1.   2.   3.   5.   2.   2.   1.   1.   0.   1.   4.  11.   1.   1.   2.   1.   1.   1.   1.   3.   4.   5.

                        TOTAL NUMBER OF OBSERVATIONS =  8047     MEAN  =     2.

             * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                    DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                     TRAILER NO. - 22  PERIOD(10/ 1/74 TO 10/31/74)

                                          HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1     *   *   *   *   *   *   *   *   *   *           *   *   *   *   *   *   *   *   *   *   *   *   3.
 2     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   1.
 3     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 4     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *           0.
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 6
 7
 8
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27
28
29
30
31

MEAN   1.  1.  1.  1.  0.  0.  0.  0.  0.  0.  0.  0.  0.  2.  1.  2.  1.  1.  1.  1.  1.  1.  2.  2.

                   TOTAL NUMBER OF OBSERVATIONS =  1087    MEAN  =    1.

          * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                      DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                        TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                             HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  MEAN
DAY

 1     *  15   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *           *   *   *   *    4.
 2     *   *  13   *   *   *   *   *   *   *  18   *   *   *   *           *  22  20   *   *   *   *    9.
 3     *  21   *   *   *   *   *                                                                        5.
 4                                                             *   *   *   *   *   *   *   *   *        0.
 5     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  14  15  15  13   *   *   *  14   10.
 6    14                                                  16   *  16  16  16  14  15  16  15           15.
 7    15  16  13  13  13  13  14  13  14  14  15   *   *   *   *   *   *   *   *   *   *   *   *   *    8.
 8     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *    0.
 9     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *    0.
10     *   *   *   *   *   *   *   *   *   *   *   *                   *   *   *   *   *   *   *   *    0.
11     *   *   *   *  17  16  17  17  16  16  15  16  20  20  15  18  18  18  21  18  16  13  16  18   15.
12    17  17  15   *   *   *                               *   *   *   *   *   *   *   *   *   *   *    4.
13     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *    2.
14     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *    1.
15     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  39  38  39  39  39  39  39  39  39   15.
16
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29
30
31

MEAN  5.  6.  4.  5.  5.  5.  5.  6.  5.  5.  6.  5.  4.  4.  6.  7.  7.  7.  9.  8.  7.  6.  7.  6.

                  TOTAL NUMBER OF OBSERVATIONS =  3476    MEAN  =    6.

            * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                 TRAILER NO. - 24  PERIOD(10/ 1/74 TO 10/31/74)

                                          HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

1
2
3
4
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11
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19
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21
22                                                                         *   *   *   *   *   *   *   3
23     *   *  13  13  14  14  14  14  14  14  14   *   *   *   *   *   *   *   *   *   *   *   *   *  12
24    13   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                                   9
25
26
27
28
29
30     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                                  0.
31                                                                 *   *   *   *   *   *   *   *   *  0.

MEAN  2.  6.  8.  8.  9.  9.  8.  9.  8.  9.  8.  7.  6.  3.  3.  4.  5.  4.  4.  4.  4.  5.  7.  7.

                 TOTAL NUMBER OF OBSERVATIONS =   853    MEAN  =    7.

          * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	2	3	4	6	5	2	2	2	4	2	0	0	3	3	3	4	5	4	1	2	1	1	2	2	3
2	2	2	1	2	2	2	2	1	6	7				5	5	4	5	5	1	1	0	3	2	2	3
3	2	2	2	4	1	0	0	2	3	3	5	7	8	10	9	9	7	5	8	3	5	2	0	0	4
4	0	0	0	0	0	0	0	0	0	0	2	7	2	1	0	4	4	2	0	1	0	1	0	1	1
5	0	0	0	0	1	2	0	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	0	1	1
6	0	0	0	0	0	0	0	0	0	0	0	1	5	7	6	4	1	1	0	0	0	0	0	2	1
7	2	2	2	1	1	2	1	2	0	1	0	0	2	3	1	3	2	3	2	0	1	1	2	2	2
8	2	2	3	2	2	2	2	2	2	3	1	1	0	0	0	1	1	3	2	1	0	2	2	2	2
9	3	3	4	1	1	4	6	6	3	2	6	6	8	6	7			5	1	0	0	2	2	1	4
10	2	2	3	2	1	0	0	3	0	6	2	1	0	4	0	3	2	6	1	0	0	1	0	0	2
11	1	1	0	0	2	0	0	0	0	0	0	0	0	1	3	1	0	1	7	6	0	0	0	0	1
12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	1	0	1	1	0	1	1	1	3	1	2	3	2	2	2	0	1	0	1	2	1	2
14	1	0	0	1	1	1	0	1	1	0	0	2	4	5	6	5	4	4	2	1	1	0	1	2	2
15	2	2	1	1	1	1	1	1	0	2	0	2	1	0	2	1	1	1	0	2	2	2	1	1	2
16	1	1	3	2	2	1	0	2	1	0	4	3	4	2	1	0	0	1	0	1	2	2	1	2	2
17	2	2	2	0	2	1	3	5	2	0	3	4	4	4	4	2	1	2	0	2	2	3	2	2	3
18	2	1	2	2	1	2	3	4	1	3				7		4	2	2	1	2	0	1	2	2	3
19	2	1	2	2	1	2	1	1	1	3	1	0	3	5	5	5	3	2	0	0	1	2	1	2	2
20	2	2	1	2	2	3	0	0	7	7	1	2	3	6	7	6	6	3	0	0	1	2	0	1	3
21	4	4	2	4	2	0	0	0	3	8	9	9	8	6	7	8	7	6	2	7	5	1	0	4	5
22	2	1	2	5	5	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1
23	0	1	1	2	3	3	4	4	5	2	0	6	7	8	1	0	0	0	1	1	1	1	0	0	3
24	0	0	0	0	0	0	0	1	1	0	2	1	1	1	2	3	5	3	0	0	2	1	0	0	1
25	0	1	0	1	1	1	2	0	2	0	0		2	4	6	5	4	2	0	0	0	0	0	1	2
26	1	1	1	0	1	1	1	1	0	3	1	3	4	1	1	0	1	2	1	0	0	0	1	0	1
27	2	1	0	1	0	1	1	1	1	1	1	3	5	5	4	4	4	6	1	0	0	0	0	0	2
28	0	0	0	0	1	0	3	2	2	1	0	2	3	4	5	5	4	1	0	0	1	3	0	1	2
29	3	4	1	0	0	0	0	1	0	0	0		3	2	4	0									2
30	1	2	1	2	0	0	0	0	0	0	2	0	3	4	4	4	3	2	1	0	0	0	0	0	2
31	1	1	0	0	0	0	0	0	1	0	1	3		6	4	1	2	0	0	0	0	0	0	0	1
MEAN	2.	2.	2.	2.	2.	1.	1.	2.	2.	2.	2.	3.	4.	4.	4.	3.	3.	3.	1.	1.	1.	1.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 8659   MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. = 21 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	6	2	2	1	1	1	1	1	1	0	3	4	5	6	6	5	6	4	2	3	5	4	4	4	4
2	4	2	1	1	1	2	1	2	3	4	5	6	6	6	6	7	5	7	5	4	5	5	5	5	4
3	5	5	4	2	1	0	1	2	4	2	7	10	12	14	17	14	14	11	14	6	6	7	8	6	8
4	8	9	6	6	5	1	0	1	0	0	2	9	5	5	5	5	7	5	6	7	1	2	3	6	5
5	4	3	3	4	5	2	2	3	2	7	5	5	4	3	2	5	3	4	3	2	3	3	3	3	4
6	2	2	1	2	2	1	0	0	0	0	3	3	6	6	4	5	4	3	0	1	3	3	3	4	3
7	2	2	0	0	1	1	1	2	1	3	6	6	4	3	7	6	9	7	2	2	4	4	4	3	4
8	3	0	1	2	1	1	1	1	1	1	2	3	5	5	5	6	5	7	4	2	4	5	5	3	3
9	3	2	0	1	0	1	4	3	3	2						7	5	4	3	1	4	3	2	0	3
10	0	1	0	0	0	0	2	0	3	1	1	1	0	0	3	5	3	3	2	2	3	2	0	2	2
11	4	2	2	2	4	1	2	1	0	0	0	0	1	2	5	5	5	9	12	6	1	0	1	1	3
12	1	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	0	0	0	0	1	1
13	0	1	2	1	0	0	0	0	0	0	0	0	1	0	0	0	2	4	0	0	0	0	0	1	1
14																									
15																									
16																									
17																									
18																								3	4
19	3	1	1	0	0	0	0	0	0	0		4	3	5	4	5	5	4	3	4	4	3	3	2	3
20	2	2	2	0	1	2	4	4	1	0	0	3	5	6	9	8	7	4	1	3		2	3	4	4
21	4	3	2	4	1	0	0	2	3	6	8	14	12	11	12	11	8	13	5	7	6	1	2	6	6
22	6	2	1	1	1	2	2	7	0	0	0	0	1	3	1	0	5	4	1	0	0	1	2	0	2
23	1	0	0	0	0	3	2	1	1	0	0	1	10	9	6	6	4	1	3	2	2	2	1	1	3
24	0	0	0	1	0	0	0	0	1	1	3	2	1	6	5	9	8	6	4	0	1	0	0	0	2
25	2	1	1	1	0	0	0	0	2	4	2	2	3	4	5	7	5	6	2	1	2	3	1	0	3
26	0	1	0	0	0	0	0	0	0	0	4	6	5	5	1	1	6	5	1	1	3	3	2	2	2
27	1	1	0	0	0	0	0	0	0	1	2	5	7	7	9	7	8	6	3	1	1	2	2	2	3
28	2	0	0												6	5	6	4	0	0	0	0	0		2
29	5	5	1	0	0	0	0	3	0	0	0	0	3	1	3	1	2	4	4	4	3	3	5	4	3
30	4	3	2	3	5	4	2	1	4	5	3	1	3	9	4	5	7	5	4	4	5	4	4	5	4
31	3	3	3	3	3	3	3	7	6	4	7	6	7	5	6	6	2	1	1	3	4	4	3	4	5
MEAN	3.	2.	2.	2.	2.	2.	2.	2.	2.	2.	3.	4.	5.	5.	6.	6.	6.	6.	4.	3.	3.	3.	3.	3.	

TOTAL NUMBER OF OBSERVATIONS = 7220   MEAN = 3.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                          DIURNAL VARIATION OF WIND SPEED(MPH)
                    TRAILER NO. * 22  PERIOD(10/ 1/74 TO 10/31/74)

                                            HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

 1      11  12  12  12  11  11  10  10   8   7           5   6   5   7   7   6   2   3   5   4   6  10   8
 2      10  10  10  10  11   9   9   9   9   9   5   4   7   7   5   6   5   2   3   3   4   9   8   7   8
 3       9   8   8   9   8  10  10   9   8   6   8   6   8   9   9  14   7   3   5   3   3   4   7   5   8
 4       2   0   4   5   3   0   0   1   0   4   7  10   6   6   5   6   4   3   1   2   1   3           4
 5
 6
 7
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12
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17
18
19
20
21
22
23                                               4   7   6   5   2   0   0   2   1   1   2   0   1   3
24       3   4   3   1   3   1   1   1   2   3   0   1   5   2   4   5   4   3   2   1   3   2   2   3   3
25       5   5   6   5   6   7   6   6   8   7   2   7   7   7   7   6   5   2   1   1   1   1   5   7   6
26       5   6   7   7   5   9   8   7   7   7   4   4   5   5   4   3   3   1   1   2   3   2   6   8   5
27       8   7   6   6   4   3   7   7   8   7   3   4   6   5   6   5   5   8   2   2   0   0   0   2   5
28       2   5   3   3   4   4   5   3   4   3   4   2   4   5   7   5   7   2   1   3   6   7   7   6   5
29       3   5   6   1   3   2   1   3   3   0   0   4   8   4   2   1   0   4   6   2   3   3   6   6   4
30       6   6   7   2   0   0   0   0   0   1   1   3   4   5   5   4   4   4   1   3   2   0   1   2   3
31       2   3   2   3   2   2   2   5   2   4   4   4   5   3   3   2   4   3   1   1   3   4   3   4   3

MEAN    6.  6.  7.  6.  6.  5.  5.  6.  5.  5.  4.  5.  6.  6.  5.  6.  5.  4.  3.  2.  3.  4.  5.  6.

                    TOTAL NUMBER OF OBSERVATIONS =  3531    MEAN  =   5.

            * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	2	2	3		2	1	0	0	0	0	1	2	1	1	1	0	0			3	3	3	1	2.
2	1	0	1	2	2	2	3	1	1	1	0	1	3	2	1			9	7	7	3	2	2	2	3.
3	1	2	3	3	3	2	2																		3.
4													4			8	7	5	1	0	0	1	0	0	3.
5	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
6																									
7																									
8																									
9	0	0	0	0	0	0	4	4	0	5	8	6	5	2	4	1	3	3	0	0	1	1	0	0	2.
10	0	0	0	0	0	0	0	0	0	1	1	0					2	1	0	0	0	0	1	1	1.
11	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	2	2	3	0	0	1.
12	0	0	0	0	0	0								0	0	0	0	0	0	0	0	0	0	0	0.
13	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.
14	0	0	1	1	1	0	1	0	0	0	0	0	0	4	7	5	2	2	0	0	0	0	1	0	1.
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0.
16	0	1	2	1	1	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1.
17	0	0	0	0	3	1	1	1	0	0	0	1	4	4	5	5	4	5	2	2	2	2	2	1	2.
18																		5	2	1	2	2	2	2	3.
19	1	0	0	2	1	1	3	1	1	3	3	6	9	7	8	8	8	8	5	5	3	1	3	3	4.
20	1	1	1	1	1	3	3	3	3	2	3	6	10	13	13	13	13	10	4	4	5	7	7	7	6.
21	2	4	6	7	11	15	13	10	14	13	17	21	13	12	14	13	13	15	6	5	10	7	4	4	11.
22	5	4	4	4	8	6	2	2	3	2	1	2	5	4	4	3	2	3	2	2	2	1	4	2	4.
23	3	1	2	2	2	2	3	2	2	2	3	0													2.
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	1.	1.	1.	2.	2.	2.	3.	2.	2.	2.	3.	3.	4.	4.	4.	4.	4.	4.	2.	2.	2.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 4749 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                               DIURNAL VARIATION OF WIND SPEED(MPH)
                            TRAILER NO. = 24  PERIOD(10/ 1/74 TO 10/31/74)

                                                 HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1
 2
 3
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27
28
29
30
31

MEAN   0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
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DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	31	33	34	36	37	39	41	43	42	36	29	23	21	20	19	19	18	18	19	19	21	24	26	28	29
2	31	33	35	37	39	42	45	46	44	37				12	12	11	10	10	10	10	12	14	16	18	25
3	19	21	22	23	24	24	26	27	27	23	17	17	17	17	24	52	50	79	81	82	80	85	76	73	41
4	76	76	72	71	73	80	85	89	88	74	53	47	42	39	37	35	34	34	35	42	52	62	88	94	62
5	95	98	100	100	99	96	96	96	93	91	88	89	87	63	80	73	66	61	63	62	93	97	99	100	83
6	100	100	100	100	100	96	91	100	100	96	76	65	57	46	38	33	27	27	29	38	56	64	70	77	70
7	81	85	88	89	90	90	92	91	64	61	47	32	28	24	22	21	21	21	20	22	34	51	60	68	55
8	71	70	75	76	79	80	82	83	73	53	39	29	21	18	18	17	17	17	17	20	29	40	51	59	48
9	62	67	63	67	70	70	67	64	57	45	36	33	31	31	30			20	22	27	34	50	60	62	49
10	65	68	69	73	74	79	78	76	67	58	41	35	32	31	30	26	26	28	32	44	56	64	65	65	54
11	70	76	81	84	85	87	91	89	90	81	84	75	64	52	72	90	94	95	90	88	96	97	99	100	85
12	99	100	100	100	100	99	98	97	98	97	87	81	78	76	73	68	64	63	68	81	86	90	91	98	88
13	99	100	100	100	100	100	100	100	98	89	71	55	37	31	29	26	25	24	26	50	64	74	77	60	69
14	84	87	94	95	95	96	98	97	92	78	62	55	48	36	29	25	23	23	23	32	51	60	68	70	64
15	74	74	75	76	77	81	80	81	74	55	41	35	26	21	19	18	17	17	28	41	48	54	59	64	52
16	63	69	69	69	71	70	66	55	39	27	22	19	18	18	18	17	18	26	37	47	53	56	60	64	45
17	67	69	69	74	78	78	75	58	42	29	24	21	19	17	17	16	16	22	33	42	49	57	60	63	46
18	65	68	71	73	73	77	72	58	42	32				21		17	16	15	16	21	27	35	43	50	45
19	54	59	60	60	64	66	68	70	62	47	35	28	19	17	16	15	14	14	15	19	22	27	35	42	39
20	46	51	53	54	56	59	61	64	56	44	31	21	19	17	17	16	16	16	17	21	26	31	36	41	37
21	44	43	47	48	47	46	39	39	37	32	32	42	43	43	33	31	30	63	83	89	86	86	92	95	53
22	95	94	95	94	91	94	95	97	95	92	88	79	56	44	38	38	44	51	61	71	78	85	90	94	78
23	93	95	96	94	92	88	89	89	83	78	67	53	52	56	68	60	59	64	76	88	91	92	96	97	80
24	95	96	95	97	97	97	98	97	93	81	75	72	59	57	55	58	55	59	70	75	82	87	93	97	81
25	98	98	99	99	100	100	100	100	98	97	94		81	70	59	50	47	51	62	81	88	93	93	95	85
26	96	96	97	96	96	96	94	94	92	81	63	41	31	28	28	28	26	28	38	58	69	72	75	79	67
27	80	80	83	84	87	90	89	91	85	70	63	52	44	38	37	38	37	51	56	63	63	70	76	80	67
28	88	90	90	91	89	87	85	84	85	79	68	60	48	44	40	41	52	71	74	83	85	85	81	79	75
29	75	81	82	86	90	91	92	92	92	87	82		87	86	87	91									87
30	92	94	94	93	96	95	95	95	94	91	88	76	64	56	53	48	54	68	72	82	86	88	90	87	82
31	81	82	76	73	72	75	75	76	74	71	69	66		66	64	64	66	68	73	76	84	85	86	88	75
MEAN	74.	76.	77.	78.	79.	80.	80.	79.	75.	66.	58.	49.	44.	40.	39.	39.	36.	41.	45.	54.	61.	66.	71.	74.	

TOTAL NUMBER OF OBSERVATIONS = 8659 MEAN = 62.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. = 21 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	28	29	31	34	38	40	47	54	50	39	30	23	18	16	15	14	14	13	14	15	18	21	24	26	28.
2	28	30	34	38	44	48	49	56	53	43	33	23	16	15	14	13	13	12	12	13	14	17	19	21	28.
3	23	25	26	29	33	40	40	47	46	40	27	20	19	19	27	50	55	82	84	81	86	81	75	74	48.
4	74	75	76	73	75	76	86	90	89	79	56	46	41	38	35	36	34	35	37	52	60	65	88	90	63.
5	90	90	90	90	90	90	90	90	90	89	90	88	83	76	71	65	62	64	65	82	90		90	90	84.
6	90	90	90	90	90	90	90	90	90	90	87	66	55	41	40	31	28	27	29	36	52	62	70	75	67.
7	74	74	78	83	84	85	81	88	80	62	44	32	24	19	19	16	17	17	19	22	30	41	54	65	52.
8	83	86	88	89	89	89	89	89	86	72	50	35	29	23	21	20	20	20	20	24	33	48	64	72	56.
9	65	68	69	69	70	73	71	66	62	54						22	19	19	19	24	33	54	60	64	52.
10	70	72	71	74	78	79	78	78	74	70	54	39	31	31	30	28	25	27	32	54	65	71	68	69	57.
11	76	78	83	85	86	85	86	85	86	86	81	67	58	51	79	86	86	86	86	85	86	85	85	85	81.
12	85	85	85	85	86	85	85	85	85	85	78	74	73	69	66	60	57	54	61	77	81	85	85	85	78.
13	85	85	85	85	85	85	85	85	85	83	73	50	35	30	27	25	22	22	26	49	70	81	82	85	64.
14	85	86	85	85	85	85	85	85	85	76	61												76	76	83.
15	74	81	84	85	85	85	85	85	84	72	50	35	24	17	15	13	12	12	13	19	33	54	60	60	52.
16	60	72	79	83	84	80	84	85	82	61	37	26	19	15	14	13	12	12	14	19	35	53	61	65	49.
17	66	70	73	76	80	84	85	84	78	60	40	26	20	17	15	13	13	13							51.
18																								59	60.
19	60	63	67	75	80	80	81	84	77	59		29	20	15	13	12	10	10	11	16	22	33	40	44	44.
20	47	53	57	62	63	63	63	63	59	48	34	21	15	13	11	10	10	10	10	15		35	43	50	37.
21	56	51	54	55	54	57	60	62	55	37	33	38	37	41	33	28	25	41	73	81	84	84	85	85	55.
22	85	85	85	85	85	85	85	85	85	85	84	80	63	45	38	37	39	54	67	73	76	82	85	85	73.
23	84	85	85	84	85	85	84	85	85	85	80	68	50	52	68	64	58	65	71	83	85	84	84	85	77.
24	85	85	85	85	85	85	85	85	85	85	83	75	61	57	55	55	54	58	68	81	81	84	85	85	77.
25	85	85	85	85	85	85	85	85	85	85	85	85	80	67	55	48	47	50	65	77	84	85	84	85	77.
26	85	85	85	85	85	85	85	85	85	85	79	65	42	27	26	26	35	34	44	65	74	78	83	82	67.
27	83	84	84	85	85	85	85	85	85	83	66	52	42	37	38	38	41	50	58	60	66	71	74	81	68.
28	83	85	85												36	43	52	76	84	85	85	85	84		74.
29	80	79	76	85	85	85	85	85	85	84	82	80	83	84	84	85	85	82	85	85	85	85	85	84	84.
30	85	85	85	85	85	85	85	85	84	71	68	65	53	46	43	50	66	65	77	83	84	85	83	80	75.
31	78	76	78	76	76	77	75	72	68	65	63	63	62	58	59	63	64	70	74	77	79	82	83	84	72.
MEAN	72.	74.	75.	76.	77.	78.	79.	80.	78.	71.	61.	51.	43.	38.	38.	37.	38.	41.	48.	55.	63.	67.	71.	73.	

TOTAL NUMBER OF OBSERVATIONS = 8146 MEAN = 62.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                         DIURNAL VARIATION OF RELATIVE HUMIDITY
                      TRAILER NO. = 22  PERIOD(10/ 1/74 TO 10/31/74)

                                               HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1      31  32  34  36  38  39  40  41  41  37          27  21  16  15  15  15  15  16  18  19  20  22  27.
  2      23  25  27  29  30  32  34  35  34  30  24  18  16  15  15  14  14  14  14  14  15  16  18  19  22.
  3      20  22  23  24  25  26  27  28  28  26  21  20  21  20  26  50  55  86  92  91  96  94  83  80  46.
  4      84  90  84  77  78  85  92  92  88  70  54  47  48  46  44  40  39  37  37  49  55  65          64.
  5
  6
  7
  8
  9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23                                              59  56  57  59  63  64  67  71  93  99  98  99 100  77.
 24     100  99  98  99 100 100 100 100  99  97  80  70  70  76  63  59  62  69  74  91  96  96 100 100  88.
 25     100 100 100 100 100 100 100 100 100 100  95  94  89  79  65  54  50  53  70  87  93  98  97  96  89.
 26      98  98  97  98  97  96  96  97  94  84  69  42  35  32  29  28  29  33  45  60  65  71  74  78  69.
 27      81  82  85  88  90  91  90  91  86  74  60  50  42  42  42  43  43  53  61  67  73  77  83  95  71.
 28      97  95  96  95  94  94  92  93  93  89  77  69  56  50  46  43  51  71  83  90  90  90  89  87  81.
 29      92  68  87  91  93  88  92  95  95  92  87  87  93  96  99 100 100  97  86  94  99  99  98  97  94.
 30      99  96  96  98  99  97  97  98  98  95  85  68  60  57  55  61  81  77  86  85  89  91  90  83  86.
 31      83  77  76  76  79  79  79  80  76  74  72  72  72  72  72  73  75  79  83  90  92  95  98  99  81.

 MEAN   76. 75. 76. 76. 77. 78. 79. 80. 78. 73. 66. 58. 54. 52. 49. 50. 52. 58. 63. 72. 76. 79. 80. 80.

                    TOTAL NUMBER OF OBSERVATIONS =  3531    MEAN  =   69.

             * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	21	22	22	22		24	24	23	20	19	18	18	19	19	18	18	18	18			20	21	21	22	21.
2	23	23	22	23	24	24	23	25	24	22	20	20	20	20	20			19	17	19	19	20	19	21	22.
3	21	20	22	23	23	24	23																		23.
4													44			35	37	38	41	46	50	64	77	81	52.
5	83	85	86	89	90	91	91	93	92	92	91	92	90	90	87	83	73	67	71	79	84	86	88	89	86.
6	90														35	32	30	32	35	42	45	47	48		42.
7	52	55	54	58	61	61	62	61	52	38	30	27	25	25	30	29	23	25	25	29	32	36	37	38	41.
8	39	40	41	41	42	43	44	44	39	32	26	21	20	20	19	19	20	21	22	25	29	32	34	36	32.
9	37	37	38	38	40	40	41	38	37	34	34	31	30	29	29	25	24	25	28	31	37	39	41	40	35.
10	40	40	41	42	43	46	47	47	49	44	34	34					25	30	34	37	39	37	38	43	40.
11	57	58	62	64	68	73	79	80	79	70	58	59	52	46	54	69	77	82	84	85	86	87	88	88	71.
12	89	89	90	90	90	91								78	72	69	65	67	71	74	77	79	80	84	80.
13	87	88	89	89	90	90	90	90	89	79	59	45	35	32	29	28	27	28	32	40	46	48	50	52	60.
14	53	53	56	61	67	71	80	86	81	62	51	41	39	31	26	24	25	25	28	33	35	37	41	43	48.
15	44	43	43	44	44	44	44	44	40	33	26	23	23	20	20	22	21	22	24	26	30	31	32	33	33.
16	34	34	35	37	38	37	39	37	36	31	25									28	29	29	29	30	33.
17	30	30	30	30	34	36	34	35	34	30	27	28	27	26	25	24	24	24	26	28	30	31	31	31	30.
18																		20	20	22	23	25	25	27	24.
19	26	26	26	27	28	28	30	29	28	28	26	23	22	21	21	20	20	20	20	23	24	25	26	27	25.
20	26	26	27	28	29	30	30	31	31	28	25	22	21	21	21	21	20	20	21	24	25	26	27	27	26.
21	28	25	25	26	27	27	28	29	30	31	31	41	39	47	39	38	37	43	79	85	91	87	87	87	47.
22	94	97	98	76	91	86	87	87	91	95	94	89	69	62	53	49	51	55	59	67	72	81	82	82	78.
23	66	85	85	86	84	85	81	83	84	80	76	68	65	65		71	68	68	70	81	87	88	88	89	80.
24	89	88	89	88	88	89	89	88	90	88	83	77													88.
25																60	58	57	63	71	78	80	81	82	71.
26	84	81	80	77	77	74	76	77	75	73	63	51	46	43	39	38	36	38	48	53	58	61	63	64	62.
27	68	69	69	72	72	73	74	75	74	68	62	57	51	50	47	49	49	55	59	62	65				63.
28																			76	77	76	73	72	74	75.
29	78	83	83	81	80	78	78	81	83	84	80	81	85	85	85	87	91	93	94	91	93	93	91	91	86.
30	87	86	88	89	92	90	89	89	87	88	88	82	79	76	71	67	68	82	82	83	83	84	84	84	84.
31	83	82	81	83	82	82	82	82	81	79	79	79	80	80	79	79	80	81	83	83	83	84	85	84	82.
MEAN	57.	57.	57.	58.	61.	60.	60.	61.	60.	56.	51.	49.	45.	45.	43.	44.	43.	44.	49.	52.	54.	55.	56.	58.	

TOTAL NUMBER OF OBSERVATIONS = 7168 MEAN = 53.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. = 24 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																			18	18	18	18	19	20	19.
18	23	27	31	36	38	40	43	47	47	49	48	48	45	34	29	26	23	20	19	18	18	19	21	23	33.
19	26	30	32	32	33	35	37	38	39	36	31	25	21	20	18	17	16	16	16	16	18	21	23	25	25.
20	27	28	29	31	33	34	34	34	35	33	29	24	21	19	18	18	18	17	17	18	19	21	24	25	26.
21	26	27	26	26	27	26	26	27	29	30	31	39	49	52	45	37	35	34	76	89					37.
22																		48	53	65	68	75	80	91	69.
23	92	86	88	87	91	90	87	88	85	78	69	62	58	61	66	69	65	65	62	91	97	95	95	95	81.
24	95	93	92	92	90	94	91	92	93	93	79	74	70	62	64	64									85.
25																									
26																									
27																									
28																									
29																98	100	100	98	89	96	96	96	91	95.
30	87	82	81	89	79	78	91	84	77	85	90	76	67	63	57	53	63	80	79	79	80	80	80	81	78.
31	81	79	77	77	78	79	80	79	80	75	73	73	77	75	74	74	76	79	83	82	82	83	85	84	79.
MEAN	57.	57.	58.	59.	59.	60.	61.	62.	61.	60.	57.	53.	51.	49.	47.	51.	50.	51.	53.	55.	55.	57.	59.	60.	

TOTAL NUMBER OF OBSERVATIONS = 2407 MEAN = 56.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	35	34	33	33	31	30	29	29	36	46	58	64	66	67	68	68	68	67	64	53	46	42	38	37	48.
2	35	34	33	32	31	30	29	30	38	49				71	70	70	71	69	66	57	49	43	40	38	47.
3	38	37	37	37	38	37	35	38	46	57	64	64	66	65	56	52	53	46	45	45	45	44	46	45	48.
4	44	45	46	47	45	43	41	40	41	47	51	51	52	54	54	56	56	55	54	50	47	45	41	38	48.
5	36	33	29	28	29	30	31	32	34	36	36	36	37	38	40	43	45	46	44	38	33	29	27	25	35.
6	25	23	22	22	22	21	21	21	24	30	37	41	45	49	52	53	54	53	51	45	41	38	35	32	36.
7	30	28	27	25	25	25	24	24	29	40	47	55	58	60	61	61	62	61	58	50	39	38	35	32	42.
8	31	30	28	27	26	25	24	23	30	42	52	59	62	63	64	65	66	64	60	49	44	37	35	34	44.
9	33	32	34	32	32	32	34	37	42	50	59	60	62	61	62			60	59	50	46	42	40	39	46.
10	37	36	35	34	34	31	31	34	39	46	55	57	59	59	60	62	61	59	54	46	42	39	38	37	46.
11	34	33	31	29	31	31	29	32	34	38	41	45	48	52	42	39	39	39	39	38	35	33	32	30	37.
12	30	30	30	29	30	31	32	33	33	34	36	38	39	41	43	45	47	48	46	44	43	41	39	34	38.
13	32	30	26	28	26	26	25	25	28	35	43	48	51	52	53	54	55	55	49	40	37	33	31	30	39.
14	28	27	23	22	22	21	19	18	23	31	38	42	46	49	50	51	52	51	47	36	30	30	27	26	34.
15	25	24	23	23	22	21	21	21	25	35	46	50	56	58	59	60	61	59	44	36	34	32	30	29	38.
16	28	26	26	26	25	26	28	36	47	56	59	61	62	63	64	64	58	45	43	40	37	35	34	32	43.
17	31	30	30	27	26	26	29	38	49	57	61	64	66	68	69	68	63	50	44	41	39	36	35	33	45.
18	32	32	30	30	29	28	30	39	50	56				66		70	70	69	61	49	45	40	38	35	45.
19	34	32	32	31	29	28	28	27	33	44	53	63	68	68	69	69	68	67	58	49	45	41	38	37	47.
20	35	34	34	33	32	32	31	31	36	45	58	64	66	67	67	67	66	65	58	48	44	41	40	39	48.
21	39	39	37	37	37	40	45	44	51	54	54	51	53	55	58	58	57	45	42	41	41	40	39	37	46.
22	36	35	35	36	37	35	34	33	35	36	39	44	51	54	56	55	53	51	49	47	45	43	42	41	43.
23	41	39	38	38	39	39	38	38	40	43	47	51	51	49	47	48	49	47	44	40	40	39	38	38	43.
24	38	38	39	38	39	38	37	37	39	44	45	46	49	49	49	49	50	45	44	43	41	36	33	31	42.
25	29	28	27	27	28	28	27	27	29	32	35		42	45	48	52	53	51	46	38	35	32	30	29	36.
26	28	27	26	26	25	25	25	25	27	35	45	54	55	56	56	54	56	54	49	42	38	36	34	32	39.
27	31	32	30	29	28	27	27	26	29	37	41	47	51	52	52	52	51	48	46	45	44	42	40	40	40.
28	39	38	37	36	36	37	37	37	38	40	42	45	48	48	49	48	45	41	39	35	35	35	35	36	40.
29	38	37	37	34	33	33	33	33	34	35	37		36	34	33	32									35.
30	29	25	25	24	22	21	21	21	21	24	27	31	34	35	36	35	34	32	30	26	25	24	23	25	28.
31	28	28	29	30	30	29	29	29	29	31	32	33		35	35	36	36	36	36	35	34	33	34	33	32.
MEAN	34.	33.	32.	31.	31.	30.	30.	31.	35.	42.	47.	51.	53.	55.	54.	55.	56.	53.	49.	44.	40.	38.	36.	35.	

TOTAL NUMBER OF OBSERVATIONS = 8663 MEAN = 41.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

CORPORATION

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. = 21 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	36	34	30	26	25	25	21	21	30	43	53	61	67	68	69	69	70	69	64	52	45	39	38	36	46.
2	35	32	27	26	23	23	23	21	29	40	53	66	70	71	72	72	72	71	67	56	47	42	39	37	47.
3	37	36	34	29	27	25	25	29	33	43	61	65	66	66	57	54	53	47	47	47	45	47	48	47	45.
4	47	47	47	48	47	46	42	40	42	47	51	53	55	56	57	57	58	57	55	49	48	47	43	40	49.
5	38	34	30	28	30	32	33	34	33	38	37	37	39	41	43	46	47	47	45	38	34	30	27	24	36.
6	23	21	19	18	19	18	19	20	22	27	34	41	46	50	53	53	54	54	50	43	40	37	34	31	35.
7	30	28	25	21	20	15	17	17	25	36	46	54	61	62	63	65	63	62	55	48	41	36	33	30	39.
8	28	26	24	22	21	20	19	18	23	34	45	52	58	59	62	63	63	62	57	48	41	36	33	31	40.
9	30	31	30	30	28	27	31	35	38	45						62	62	62	58	48	43	38	37	35	41.
10	32	30	30	30	29	26	28	30	36	42	50	56	57	58	60	61	62	58	52	43	39	35	36	35	43.
11	31	30	29	30	30	29	28	30	30	35	41	46	49	51	42	41	41	41	39	36	35	35	34	30	36.
12	30	30	30	29	30	30	30	31	30	34	36	38	41	41	44	46	47	48	46	43	41	40	35	36	37.
13	30	27	25	24	25	25	25	22	24	32	41	47	51	52	52	55	57	54	49	39	35	30	30	33	37.
14	25	25	21	20	20	19	17	15	22	30	36												25	25	23.
15	24	19	19	17	15	14	14	15	18	26	37	45	53	57	57	60	60	58	51	40	34	30	30	30	35.
16	29	24	20	19	20	20	19	18	21	33	44	52	57	61	62	62	62	62	54	46	40	35	33	30	39.
17	31	30	26	26	23	20	20	21	25	36	47	56	61	64	68	68	68	66							42.
18																								32	33.
19	31	31	30	25	23	22	21	20	24	35		56	66	68	69	69	68	68	60	47	42	38	38	36	43.
20	30	28	32	29	31	31	30	30	34	42	55	63	66	68	68	68	67	63	56	46		38	39	37	46.
21	37	37	36	36	35	34	33	34	40	55	53	52	55	55	57	59	57	50	44	41	41	40	36	35	44.
22	36	36	36	36	35	34	32	32	35	35	37	41	49	54	56	56	53	50	47	46	46	43	41	41	42.
23	41	40	38	36	37	38	40	37	36	36	42	47	52	50	46	46	47	46	45	41	40	40	38	35	42.
24	35	36	35	35	35	35	35	35	35	37	41	45	46	50	49	50	51	47	44	40	41	36	33	33	40.
25	28	26	25	25	25	25	25	25	26	30	31	36	40	45	51	52	52	51	44	39	36	31	29	26	35.
26	25	25	23	21	20	20	20	20	22	28	36	43	54	57	57	56	54	52	48	41	36	35	32	30	36.
27	30	30	30	28	25	25	25	23	25	29	39	47	52	52	52	52	51	48	47	47	44	41	41	39	39.
28	37	36	36												50	47	44	40	36	34	32	31	30		38.
29	37	37	36	34	30	32	32	34	35	36	37	40	37	37	36	32	31	32	33	33	32	31	31	30	34.
30	27	25	25	23	21	21	21	20	26	30	30	34	36	36	36	35	32	30	27	25	25	25	25	27	28.
31	29	30	28	28	30	29	30	31	30	32	35	36	36	36	36	36	38	37	37	36	35	31	35	34	34.
MEAN	32.	31.	30.	28.	27.	27.	27.	26.	30.	37.	43.	49.	53.	55.	55.	55.	55.	53.	49.	43.	40.	37.	35.	34.	

TOTAL NUMBER OF OBSERVATIONS = 8157 MEAN = 39.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                              DIURNAL VARIATION OF TEMPERATURE(DEG F)
                          TRAILER NO. = 22  PERIOD(10/ 1/74 TO 10/31/74)

                                             HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1      38  36  35  34  33  33  32  32  38  47          63  69  69  69  70  67  62  53  49  45  43  41  48.
 2      39  37  36  35  35  34  34  35  40  50  63  69  70  71  71  72  72  71  66  61  52  47  44  43  52.
 3      41  40  41  41  40  40  41  42  49  59  66  66  68  67  58  55  55  49  47  47  45  45  48  47  50.
 4      46  44  47  50  49  47  45  44  46  51  54  55  54  55  56  58  58  58  55  50  49  47          51.
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20
21
22
23                                              51  51  51  50  49  50  49  48  42  42  41  41  40  47.
24      41  41  41  41  41  40  39  38  39  41  46  48  48  48  51  52  51  49  47  42  41  39  36  33  43.
25      32  31  31  30  31  30  30  29  29  31  37  40  42  47  51  54  55  52  47  41  37  29  34  33  38.
26      32  32  31  30  30  30  29  28  30  36  46  55  55  56  58  57  57  53  49  44  40  38  37  35  42.
27      34  34  33  32  31  31  30  30  32  38  46  51  51  54  54  53  52  50  48  47  45  44  42  41  42.
28      40  39  38  38  38  38  36  39  39  41  44  46  49  50  51  51  48  44  41  38  37  37  37  37  42.
29      37  38  39  37  36  38  37  36  36  37  40  40  38  35  34  33  32  32  34  33  31  30  38  30  36.
30      28  27  26  25  25  25  24  24  26  29  32  35  36  37  37  36  32  32  29  29  27  27  29  31  30.
31      31  32  32  32  31  31  31  31  32  33  34  35  36  37  37  38  38  38  36  36  35  34  34  33  34.

MEAN   37. 36. 36. 36. 35. 35. 34. 34. 37. 42. 47. 50. 51. 53. 53. 53. 52. 50. 47. 44. 41. 39. 38. 37.

                    TOTAL NUMBER OF OBSERVATIONS =  3531    MEAN  =   43.

              * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	43	47	45	43		40	42	53	62	72	75	76	76	76	74	72	69	63			51	49	48	47	59
2	46	45	42	45	43	43	39	43	52	63	72	76	77	78	79			70	60	56	51	49	43	48	55
3	46	44	46	46	46	46	43																		46.
4													51			69	65	63	59	55	52	49	46	43	55
5	40	38	36	36	38	38	38	39	40	41	41	41	43	44	47	50	55	55	50	43	39	37	36	35	42
6	35														54	53	51	49	45	41	38	37	36		45
7	33	32	33	29	29	29	29	30	39	50	57	61	63	64	59	60	64	57	53	48	41	38	37	36	45
8	34	33	32	31	31	30	30	31	40	51	60	65	66	67	69	66	62	61	55	48	43	40	39	38	47
9	37	37	39	39	38	39	40	45	47	53	57	62	62	65	62	64	63	60	54	47	42	42	41	41	49.
10	41	41	40	39	37	35	36	37	40	50	56	55					59	55	50	46	42	40	38	37	44
11	36	34	33	30	32	31	31	32	34	41	47	45	51	52	44	40	38	37	35	34	32	32	31	30	37.
12	29	29	29	29	30	31								53	58	59	60	58	55	53	52	50	47	43	45.
13	41	40	39	37	37	37	37	38	42	53	61	65	69	70	71	72	71	67	59	50	45	44	42	42	52.
14	42	41	39	35	33	30	28	29	38	49	56	30	65.	68	69	69	66	62	53	46	44	42	38	34	47.
15	33	30	29	28	28	28	28	28	35	46	54	58	78	80		83	81	75	66	54	42	42	41	40	47.
16	39	38	37	36	36	35	34	37	41	53	61														41.
17																									
18																		67	63	58	54	51	49	47	55.
19	49	48	49	44	43	45	42	45	48	55	62	66	69	70	71	70	69	67	61	54	51	53	51	49	56.
20	49	49	47	47	46	45	46	44	46	54	61	65	66	68	68	67	66	64	59	52	50	51	50	50	55.
21	49	50	51	50	52	52	52	52	53	55	55	51	53	53	58	58	57	51	43	42	41	42	41	41	50.
22	37	37	37	36	43	42	42	41	39	38	41	46	51	54	56	56	54	52	51	48	47	45	44	44	46.
23	43	43	42	41	42	41	42	41	41	45	48	50	51	50		49	49	48	47	40	40	40	40	39	44.
24	39	40	40	40	40	38	38	38	39	40	44	46													41.
25																	53	52	48	43	39	39	38	38	44.
26	36	36	37	35	35	36	36	35	37	41	50	53	55	56	57	56	56	55	50	45	42	41	41	40	45.
27	38	39	39	36	38	37	36	35	38	42	46	49	51	51	53	52	51	48	46	45	43				44.
28																			39	38	38	38	40		39.
29	38	37	36	37	37	38	37	36	36	36	38	39	37	36	34	33	31	31	31	33	32	31	31	31	35.
30	30	29	28	27	24	26	27	27	27	28	29	32	34	35	35	36	34	32	30	29	29	29	29	30	30.
31	30	30	30	30	30	30	30	30	30	32	32	33	34	35	35	35	35	35	35	35	36	35	35	34	33.
MEAN	39.	39.	39.	37.	37.	37.	37.	38.	42.	48.	53.	53.	58.	59.	58.	58.	57.	55.	51.	46.	43.	42.	41.	40.	

TOTAL NUMBER OF OBSERVATIONS = 6815 MEAN = 46.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                    DIURNAL VARIATION OF TEMPERATURE(DEG F)
                TRAILER NO. = 24  PERIOD(10/ 1/74 TO 10/31/74)

                                        HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

 1
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MEAN   0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
											HOUR														
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*																						0.
4				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*	*	*				*		*	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*									0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 8306 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                    DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
                      TRAILER NO. = 21  PERIOD(10/ 1/74 TO 10/31/74)

                                              HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  2       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  3       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  4       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  5       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  6       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  7       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  8       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  9       *   *   *   *   *   *   *   *   *   *                       *   *   *   *   *   *   *   *   *   0.
 10       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   1.
 11       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 12       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   1.
 13       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   2.
 14       *   *   *   *   *   *   *   *   *   *   *                                               *   *   1.
 15       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 16       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 17       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                           0.
 18                                                                                               *   3.
 19       *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 20       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   7  14       *   *   *   1.
 21       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 22       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  10   7   *   1.
 23                   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 24       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 25       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 26       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 27       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 28       *   *   *                                           *   *   *  28  75  95 129  88  79      40.
 29       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 30       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 31       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.

MEAN     0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  1.  3.  4.  5.  4.  2.  0.

                 TOTAL NUMBER OF OBSERVATIONS =  8057    MEAN  =    1.

            * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. = 22 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	10	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	1.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			0.
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23												*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
MEAN	1.	1.	1.	1.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 3511 MEAN = 1.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	1.
3	*	*	*	*	*	*	*																		0.
4													*			*	*	*	*	*	*	*	*	*	0.
5																									
6																									
7																	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*					*	*	*	*	*	*	*	*	0.
11																									
12														*	*	*	*	*	*	*	*	*	*	*	0.
13																									
14																									
15																									
16																									
17																									
18																									
19						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20																									
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	22	36	*	28	*	21	70	12	7	42	61		*	*	*	*	*	*	*	*	*	13.
24	*	*	*	*	*	*	*	*	*	*	*	*													0.
25																		*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				0.
28																			*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	97	48	*	*	*	6.
MEAN	0.	0.	0.	1.	3.	0.	2.	0.	2.	5.	1.	1.	3.	5.	0.	0.	0.	0.	0.	6.	3.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 4455 MEAN = 1.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                 DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
                   TRAILER NO. = 24  PERIOD(10/ 1/74 TO 10/31/74)

                                          HOUR
           1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1
 2
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                   0.
22                                                                         *   *   *   *   *   *   *   0.
23         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
24         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                                   0.
25
26
27
28
29                                                             *   *   *   *   *   *   *   *   *   0.
30         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
31         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.

MEAN      0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

                 TOTAL NUMBER OF OBSERVATIONS =  1468    MEAN  =    0.

             * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                       DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
                              TRAILER NO. - 20  PERIOD(10/ 1/74 TO 10/31/74)

                                           HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

   1
   2   5   5   5   5   5   5   5   5   5   5                                                           6.
   3
   4
   5
   6                   8   9   5  10  10   8   8   7   7                                               9.
   7                  17  18  18  18  17  18                                                          18.
   8
   9
  10
  11
  12
  13
  14
  15                                                   8   6   6   6   6  10  10   9   8   8   8   8.
  16   8   8   8   8   8   8   8   8   7   7   7   7   7   7   7   7   7   7   7   8   8   8   8   8   8.
  17   8   8   8   7   8   8   8   8   7   7   7   7   7   7   7   7   7   7   7   7   8   8  10   8   8.
  18   9   8   8   8   8   8   8   7   9   9                       7   7   7   7   7   7   7   7   7   8.
  19   7   7   7                                                                                       7.
  20                   7                                                                               [illegible]
  21                   8                                   9   9           8   8   8   8           8   9.
  22   8   8   8       8   8   7   7   7   7   8   8   7   7   7   7   7   7   8   8   8   8   8   8   8.
  23   9   8   8       8   9   8   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   8.
  24   7   7   8       8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8  10   9   7   8.
  25   8   8   8       8   8   7   7  10   7   7       8   8   8              12                       8.
  26           8   8                                                                                   9.
  27                                                                           8                       8.
  28                                                           8   8   8   8   8   9   8   8   8   8   8.
  29   8   8   8   8   8   8   8   8   8   8   8       8   8   8   8                                   8.
  30   8   8   8       8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8.
  31   8   8   8       7   7   7   7   7   7   7   7       8   8   8   8   8   8   8   8   8   8   8   8.

MEAN  8.  8.  8.  8.  9.  9.  9.  9.  9.  9.  8.  8.  8.  8.  8.  7.  7.  8.  8.  8.  8.  8.  8.  8.

                      TOTAL NUMBER OF OBSERVATIONS =  3185    MEAN  =    8.
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CORPORATION

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                  DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
                          TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                             HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1   170 181 178 186     189 189 178 180 183 196 198 198 201 194 201 192             144 164 176 185 186
  2   185 182 159 185 172 191 164 165 165 177 171 171 177 169 186         139 155 168 169 170 161 158 170
  3   183 175 169 169 176 169 157                                                                     173
  4                                                   133             179 175     183 181     181     172
  5
  6                                                                               45  39  38  47       43
  7                  42                                                                                43
  8
  9
 10
 11                    53  39  45  48  54  57  82  74  67  86  69  87  92  85  89  86  80  81  78  81  72
 12     47  54  57                                                                                     53
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23     95 112  98                                                                                    102.
 24
 25                                                               185  46      80 105 122  98 110  91 103.
 26   110  97  95 116 109  87 102 105  95 113 117 138  95 138 127 140 132 118 108 111 120 112 127 121 114.
 27   115 121 128  91 103 117  73  83 134 164 201 201 201 201 201 201 201 201 201 183 193             157.
 28
 29    95  96  93 102  87  98  93 102 120  75 113 122 129  92 124 123 122  80 106  91  86  67  90 106 100.
 3.    71  85  92  82  83  86  91  82  73  95  91  93 106  99  95  96  97  92 101 106  58  80  73  72  86.
 31    74  78  96  90  59  85  68  70 106 106  98  70  94  68  92  86  58  90 106 106 106 106  94 108  89.

MEAN  115.120.116.118.107.122.111.105.118.122.135.134.135.133.134.141.124.119.120.117.117.102.112.116.

                  TOTAL NUMBER OF OBSERVATIONS =  2431     MEAN  = 120.
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              DIURNAL VARIATION OF METHANE (UG/M**3 X 10**-2)
               TRAILER NO. - 20  PERIOD(10/ 1/74 TO 10/31/74)

                                          HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
 DAY

   1
   2   5   5   5   5   5   5   5   5   5   5                                                           6.
   3
   4
   5
   6
   7
   8
   9
  10
  11
  12
  13
  14
  15                                                                       6   8   8   8   8   8   8   8.
  16
  17
  18                                                               6   6   6   7   7   7   7   7   7   7.
  19   7   7   7                                                                                       7.
  20                   7                                                                               7.
  21                   7                                   7   8           8   8   8   8           8   8.
  22
  23
  24           8       7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7  10   9   8   8.
  25   8   8   8       7   8                               8   8               8                       8.
  26           8   8                                                                                   8.
  27                                                                               8                   8.
  28                                                           7   7   7   7   7   8   7   7   7   7   8.
  29   7   7   7   7   7   7   7   7   7   7   7       7   7   7   7                                   7.
  30   7   7   7                                                                                       8.
  31                   7   7   7                                                       7   7   7   8   8.

MEAN  7.  7.  7.  7.  7.  7.  7.  7.  7.  7.  7.  8.  7.  7.  8.  7.  7.  7.  8.  8.  8.  8.  8.  8.

                    TOTAL NUMBER OF OBSERVATIONS =  1296     MEAN  =     7.
                    DIURNAL VARIATION OF METHANE (UG/M**3 X 10**-2)
                     TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                 HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1     136 141 134 132     141 140 142 135 143 144 141 141 140 132 134 140             139 141 140 140 139.
 2     139 133 124 124 138 133 134 127 137 131 136 131 135 120 134         121 120 136 132 135 123 136 131.
 3     133 125 132 130 135 136 122                                                                     131.
 4                                                 121             132 136     127 126     122         127.
 5
 6                                                                             44  38  37  42           40.
 7      50  41  40  32  40  44  39  43  46  51  53  53  53  53  92                                      53.
 8
 9
10
11
12
13
14
15
16
17
18                                                                      5       7   7   7   7   7       8.
19       7   7   7   7   7   7   7   7   7   7   7   7  14   7   7   8   9   7   7   7   7   7   7   7   8.
20       7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   8.
21                                                   7   7   7   7   7   7   7   7   7   7   7   7   7.
22       7   7   7   7   7   7   7   7   7   7   7   7   7   7   6  64   7   7   7   7   7   7   7   7   9.
23                                                                                 7   7   7   7   7   7.
24       7   7   7   7   7   7   7   7   7   7   7   7                                                   7.
25                                                               8   6      12   7   8   7   8   8   8.
26       8   7   7   7   7   7   7   7   8   8   8   7   8   8   7   7   7   7   8   7   8   8   8   8   8.
27       8   8   8   8   8   8   8   8   7   8   7   7   7   7   7   7   7   6   5   6   6               8.
28                                                                                  7   8   8   8   8   8   8.
29       8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   7   7   7   7   7   7   7   7   8.
30       7   7   7   7   7   7   7   7   7   7   8   7   8   8   8   7   8   7   8   8   8   8   8   8   8.
31       8   8   8   8   8   7   8   8   8   8   8   8   8   8   7   8   7   8   8   8   8   8   8   8   8.

MEAN   45. 39. 42. 36. 32. 41. 39. 32. 32. 33. 34. 33. 39. 32. 31. 25. 26. 21. 17. 23. 27. 27. 30. 26.

                       TOTAL NUMBER OF OBSERVATIONS =  3637    MEAN  =   32.
```

```
                DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
                       TRAILER NO. - 20  PERIOD(10/ 1/74 TO 10/31/74)

                                              HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1
  2    0   0   0   0   0   0   0   0   0   0                                                            0.
  3
  4
  5
  6
  7
  8
  9
 10
 11
 12
 13
 14
 15                                                                    0   1   1   0   0   0   0    1
 16
 17
 18                                                            0   0   0   0   0   0   0   0   0    0
 19    0   0   0                                                                                    0
 20                    0                                                                            0
 21                    0                                   1   0           0   0   0   0           0    0
 22
 23
 24            0       0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0    0
 25    0   0   0       0   0                               0   0               3                        0
 26            0   0                                                                                    0
 27                                                                                0                    0
 28                                                            0   0   0   0   0   0   0   0   0   0    0
 29    0   0   0   0   0   0   0   0   0   0   0       0   0   0   0                                    0
 30    0   0   0                                                                                        0
 31                    0   0   0                                                       0   0   0   0    0

MEAN  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  1.  0.  0.  0.  0.  0.

                  TOTAL NUMBER OF OBSERVATIONS =  1206    MEAN  =   0.
```

CORPORATION

```
        DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
                   TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                              HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1       33  39  43  53      47  48  36  44  40  52  57  57  60  61  66  52                   5  22  36  45  46
 2       45  48  34  60  34  57  29  37  28  45  34  40  42  48  52          17  34  31  37  34  37  22  39
 3       50  49  36  38  40  32  45                                                                      42
 4                                                   11                  47  39      55  54      58      45
 5
 6                                                                                    1   1   1   4       2
 7                    9                                                                                  10
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25                                                              177  40      67  96 113  90 102  83  94
26      102  89  87 108 101  79  94  97  87 105 109 130  87 130 119 132 124 110 100 103 112 104 119 112 106
27      107 113 100  83  95 109  65  75 126 155 193 193 193 193 193 194 194 194 194 175 186             149
28
29       86  87  84  93  78  89  84  93 111  66 104 113 120  83 115 115 114  72  98  83  78  59  82  98  92
30       63  78  84  74  74  78  83  74  65  87  83  85  98  91  86  88  89  83  92  97  50  71  65  64  80
31       66  73  88  82  51  77  59  61  98  97  90  61  85  59  85  77  50  81  98  98  98  98 103  99  81

MEAN     69. 72. 70. 59. 62. 71. 64. 68. 80. 86. 95. 97. 90. 95.106.119. 91. 92. 99. 84. 78. 64. 69. 75.

                          TOTAL NUMBER OF OBSERVATIONS =  2146    MEAN  =   81.
```

```
                 DIURNAL VARIATION OF CARBON MONOXIDE(UG/M**3 X 10**=2)
                     TRAILER NO. = 20  PERIOD(10/ 1/74 TO 10/31/74)

                                             HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1                                            13  13  13  13  13  13  13  13  13  14  13  14  14  13  14.
 2    13  14  13  13  14  14  14  13  13  13              11  14  14  14  14  13  13  14  14  13  13  14.
 3    13  13  13      18  17  17  17  17  17  17  17  16  16  17  16  16  16  16  16  16  16  16  16  17.
 4    16  17  16      16  19  19  19  18  17  16  17  17  16  17  17  17  16  17  17  17  17  17  20  18.
 5    19  21  26      26  19  18  18  18  18  19  18  18  17  17  17  18  17  18  18  18  18  18  18  19.
 6    18  18  18      21  19  18  18  18  18  18  18  19                                              19.
 7                    44  39  43  44  42  43                                                          43.
 8
 9
10
11
12
13
14
15                                                        13  14  14  14  14  13   4   3   4   4   4   9.
16     4   5   4   4   4   4   5   5   5   5   4   5   4   4   4   4   8   5   4   4   4   4   4   8   5.
17     4   4   4   4   4   4   4   4   6   9   4   4   4   4   4   4   4   8   4   4   4   8   4   4   5.
18     7   4   4   4   4   4   4   4   8   4               6       4   4   4   4   4   4   4   4   4   5.
19     4   4   4                                                                                       5.
20                                                                                                     5.
21                                                                 2   1       1                       2.
22     1   1   1                                                                                       1.
23
24                                     1  10       1   1   1               4   1   1   1       6   1   3.
25     1   1   1                                       6   8   6   6   6   6   6   7   7   7   7   7   6.
26     7   6   7   7   6   7   7   7   7   7   7   7   6   6   6   6   6   6   7   6   7   7   7   7   7.
27     7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7   7.
28     7   7   7   7   7   7   7   7   7   7   7   7   7   7   6   6   6   6   6   7   7   7   7   7   7.
29     7   7   7   6   7   7   7   7   7   7   7       7   7   7   7                                   7.
30     7   7   7                                                                                       7.
31                                                         7   7   7   7   7   7   7   7   8   7   7   8.

MEAN   9.  9. 10.  7. 14. 12. 13. 12. 13. 13. 11. 11. 10. 10. 10.  9. 10. 10.  9.  9.  9. 10.  9. 10.

                      TOTAL NUMBER OF OBSERVATIONS =  3917    MEAN  =   10.

          * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
```

```
              DIURNAL VARIATION OF CARBON MONOXIDE(UG/M**3 X 10**-2)
                  TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                 HOUR
        1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 MEAN
DAY

  1    90   31   86   63        105  103  101  102  106   93   99   75   96   70   78   79                 141   89   83   66   90.
  2    67   73   75   94   65   76   59   91   65   80   60   59   51   58   50             58   77   63   61   68   53   74   68.
  3    54   57   88   59   63   53   58                                                                                     61.
  4                                                              85                  25   73  101  113   93  100   94   76   74   84.
  5
  6
  7
  8
  9
 10
 11
 12
 13
 14                        82   94   52   59   58   94   90   64                                                              73.
 15
 16
 17
 18                                                                                                   13   13   15   16   16   15.
 19    17   19   17   18   17   15   17   17   17   18   23   20   19   20   19   21   17   19   25   19   17   21   17   19   19.
 20    19   17   18   20   19   26   16   17   18   22   19   18   19   18   16   16   16   17   17   16   16   15   17   16   18.
 21                                                              14   13   14   14   14   14   13   19   14   13   15   15   15.
 22    17   17   16   18   14   18   17   16   20   20   20   18   20   17   17   93   13   16   15   16   17   16   17   19   20.
 23    16   17   18  -53                                                                14   15   14   14   15   14   14   14   -6.
 24    13   14   15   16   15   17   15   17   15   20   20   16                                                                17.
 25                                                                                  27   14        34   17   17   18   19   19   21.
 26    20   17   18   19   19   18   20   19   19   20   22   21   19   21   20   21   19   18   20   18   20   19   20   19   20.
 27    18   19   19   19   18   20   17   18   19   22   24   25   24   29   30   28   31   40   29   23   21                  24.
 28                                                                                                 18   27   28   27   23   25   25.
 29    26   25   25   27   25   29   26   27   31   25   29   29   30   29   28        28   22   23   22   21   22   22   25   26.
 30    24   22   23   24   23   24   23   23   25   25   26   23   25   25   23   24   23   24   24   23   24   23   23   24   24.
 31    25   24   23   25   24   25   25   24   27   25   27   25   25   24   23   26   25   27   26   27   28   28   32   27   26.

MEAN  34.  31.  33.  12.  33.  40.  35.  36.  35.  38.  37.  35.  32.  32.  28.  33.  29.  31.  32.  28.  32.  33.  30.  31.

                        TOTAL NUMBER OF OBSERVATIONS =  3631      MEAN  =   32.
```

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. = 20 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	32	33	33	33	33	33	34	33	35	41	49	57	62	58	57	56	55	54	49	36	36	35	34	35	43
2	35	34	35	36	34	34	35	34	37	41				58	58	59	58	56	54	43	40	38	38	38	43
3	39	39	40	*	*	*	*	*	*	7	18	20	20	18	15	12	13	5	5	*	2	*	2	5	11
4	2	*	3	*	*	*	*	*	*	*	3	5	7	9	8	10	9	8	6	2	*	*	*	*	3
5	*	*	*	*	*	3	1	*	3	19	30	33	34	34	36	36	39	40	36	16	8	4	1	*	16
6	*	*	*	*	*	*	*	*	*	16	31	35	31	48	46	47	51	45	36	23	18	15	12	9	20
7	11	10	10	*	*	*	*	*	*	11	25	39	38	37	36	37	35	33	33	18	8	7	6	4	17
8	6	6	4	3	2	2	2	*	4	13	17	28	36	37	37	37	36	33	26	11	8	5	3	4	16
9	5	6	7	7	7	5	8	9	9	17	26	27	26	25	27			52	47	36	31	30	30	27	21
10	26	27	26	26	25	22	18	22	24	31	44	47	49	48	48	50	47	47	42	29	26	25	25	22	34
11	19	22	20	17	19	18	13	16	15	26	39	44	45	46	46	36	33	35	48	50	34	26	19	14	29
12	15	15	12	8	8	9	9	8	8	12	24	28	29	30	31	35	36	35	29	18	13	11	12	5	19
13	3	3	4	4	4	4	4	3	5	14	28	42	54	53	53	54	53	51	40	25	25	21	20	19	25
14	18	15	11	11	10	10	6	7	10	21	36	40	43	51	55	55	54	53	46	31	27	27	24	26	29
15	25	26	25	24	24	24	25	24	25	34	36	40	53	58	57	55	52	47	33	28	29	28	28	29	35
16	28	25	26	27	27	27	28	32	41	50	53	52	49	49	48	46	37	25	27	23	23	25	23	24	34
17	24	24	25	20	20	21	20	28	38	48	53	52	48	48	46	47	41	26	25	25	24	24	25	25	33
18	26	25	24	24	24	22	23	28	37	43						43	42	40	30	21	19	19	20	19	28
19	20	20	21	*	*	*	*	*	*	4	6	19	37	38	38	36	34	33	18	13	14	13	13	13	17
20	11	12	13	*	*	*	*	*	2	6	16	23	22	19	18	19	20	20	9	*	*	*	*	*	9
21	*	1	*	*	*	*	*	*	2	8	14	18	18	15	23	22	17	11	6	4	6	2	*	*	7
22	*	*	*	*	*	*	*	*	*	*	*	*	14	22	24	22	17	8	6	4	1	*	*	*	5
23	*	*	*	2	3	5	3	3	8	11	19	31	30	29	26	31	30	20	24	27	23	18	12	9	16
24	6	5	4	*	*	*	*	1	5	17	20	25	31	30	30	30	31	29	17	20	12	8	2	*	14
25	*	*	*	1	4	16	5	7	10	16	23		33		39	38	38	34	22	12	7	5	6	7	15
26	5	4	6	6	8	9	10	10	12	19	28	48	52	51	49	48	49	44	35	23	13	12	15	17	24
27	17	18	18	17	16	15	16	13	16	23	28	46	48	48	46	46	46	41	39	35	37	27	23	18	29
28	18	16	14	14	16	17	18	21	21	28	38	43	46	47	48	46	45	43	32	21	16	18	18	21	28
29	37	37	32	25	20	17	15	14	14	21	24		43	49	50	51									30
30	31	28	27	*	*	*	*	*	*	*	*	11	23	25	25	26	23	23	16	2	1	*	*	*	11
31	3	3	11	*	*	*	*	*	*	*	*	*		46	45	45	44	44	43	37	23	23	25	24	19
MEAN	15.	15.	15.	12.	10.	10.	10.	10.	13.	19.	26.	32.	37.	39.	39.	40.	38.	35.	30.	21.	18.	16.	15.	14.	

TOTAL NUMBER OF OBSERVATIONS = 8566 MEAN = 22.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	42	44	44	44		45	45	45	43	42	41	40	39	39	39	39	40	19			43	44	44	44	42.
2	45	45	48	46	46	46	45	51	46	44	43	42	42	38	40			55	46	43	45	44	48	47	45.
3	47	46	46	45	45	45	50																		47.
4													40			28	20	16	8	2	1	5	1	2	12.
5	*	*	*																						
6																									0.
7																5	*	*	*	*	*	*	*	*	0.
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																		5	5	7	7	7	7	7	7.
19	5	5	6	8	7																				7.
20	11	11	10	11	10	12	13	13	11	10	11	12	15	16	17	17	18	16	12	11	13	15	14	14	13.
21													18	18	20	21	17	20	9	10	12	11	8	8	15.
22																									
23																									
24	35	35	32	32	35	34	35	32	29	27	27	32													33.
25																									
26																									
27	11	12	12	12	12	12	13	12	11	11	11	11	10	8	8	8	8	10	10	13	15				11.
28																			13	11	9		9	8	10.
29	8	8	8	8	7	8	7	7	7	7	7	7	7	7	7	6	6	6.	6	6	6	6	5	5	7.
30	5	5	6	5	5	6	5	6	6	6	6	7	9	9	11	11	11	12	10	10	12	12	13	12	9.
31	12	13	15	16	17	14	14	12	12	17	17	18	18	18	18	18	17	16	14	13	12	11	8	11	15.
MEAN	21.	21.	21.	23.	21.	25.	25.	23.	21.	21.	21.	22.	22.	20.	19.	18.	16.	16.	12.	12.	14.	16.	15.	15.	

TOTAL NUMBER OF OBSERVATIONS = 2702 MEAN = 19.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

```
                                HOURLY TOTAL SOLAR RADIATION(LANGLEY)
                                  TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                     HOUR
          1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 TOTA
DAY

  1
  2
  3
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 21
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 23
 24
 25
 26
 27
 28
 29
 30
 31

 TOTAL   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

```
                         HOURLY TOTAL PRECIPITATION(INCHES)
                     TRAILER NO. = 20  PERIOD(10/ 1/74 TO 10/31/74)

                                        HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOT
DAY

 1
 2
 3
 4
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16
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31

 TOTAL  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

```
                                   HOURLY TOTAL PRECIPITATION(INCHES)
                                TRAILER NO. = 21  PERIOD(10/ 1/74 TO 10/31/74)

                                                HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOT
DAY

 1
 2
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

TOTAL   0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

```
                              HOURLY TOTAL PRECIPITATION(INCHES)
                          TRAILER NO. = 22  PERIOD(10/ 1/74 TO 10/31/74)

                                             HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOTAL
DAY

 1
 2
 3
 4
 5
 6
 7
 8
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10
11
12
13
14
15
16
17
18
19
20
21
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23
24
25
26
27
28
29
30
31

TOTAL    0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

```
                                    HOURLY TOTAL PRECIPITATION(INCHES)
                                TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                  HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOTA
DAY

 1
 2
 3
 4
 5
 6
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

TOTAL    0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

```
                               HOURLY TOTAL PRECIPITATION(INCHES)
                          TRAILER NO. = 24  PERIOD(10/ 1/74 TO 10/31/74)

                                                 HOUR
          1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 TOTA
DAY

 1
 2
 3
 4
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 6
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 8
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10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

 TOTAL   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

DIURNAL VARIATION OF WIND SPEED AT 8 FEET(MPH)
TRAILER NO. = 23   PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	2	2	3		2	1	0	0	0	0	1	2	1	1	1	0	0			3	3	3	1	2.
2	1	0	1	2	2	2	3	1	1	1	0	1	3	2	1			9	7	7	3	2	2	2	3.
3	1	2	3	3	3	2	2																		3.
4													4			8	7	5	1	0	0	1	0	0	3.
5	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
6																									
7																									
8																									
9	0	0	0	0	0	0	4	4	0	5	8	6	5	2	4	1	3	3	0	0	1	1	0	0	2.
10	0	0	0	0	0	0	0	0	0	1	1	0					2	1	0	0	0	0	1	1	1.
11	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	2	2	3	0	0	1.
12	0	0	0	0	0	0								0	0	0	0	0	0	0	0	0	0	0	0.
13	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.
14	0	0	1	1	1	0	1	0	0	0	0	0	0	4	7	5	2	2	0	0	0	0	1	0	1.
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0.
16	0	1	2	1	1	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1.
17	0	0	0	0	3	1	1	1	0	0	0	1	4	4	5	5	4	5	2	2	2	2	2	1	2.
18																		5	2	1	2	2	2	2	3.
19	1	0	0	2	1	1	3	1	1	3	3	6	9	7	8	8	8	8	5	5	3	1	3	3	4.
20	1	1	1	1	1	3	3	3	3	2	3	6	10	13	13	13	13	10	4	4	5	7	7	7	6.
21	2	4	6	7	11	15	13	10	14	13	17	21	13	12	14	13	13	15	6	5	10	7	4	4	11.
22	5	4	4	4	8	6	2	2	3	2	1	2	5	4	4	3	2	3	2	2	2	1	4	2	4.
23	3	1	2	2	2	2	3	2	2	2	3	0													2.
24																									
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	1.	1.	1.	2.	2.	2.	3.	2.	2.	2.	3.	3.	4.	4.	4.	4.	4.	4.	2.	2.	2.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 4749   MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF WIND SPEED AT 30 FEET(MPH)

TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16	1	0				3	3	2	2										3	4	3	2	2	3	3.
17	2	2	2	2	4	2	2	2	3	1	2	4		6	7	6	6	8	4	3	2	3	3	3	4.
18	2	2	3	2	2	3	2	1	1	2	5	5	7	7	9	10	9	8	7	3	4	3	3	3	5.
19	1	0	1	3	3	2	4	1	1	3	4	8	11	9	9	10	11	10	7	8	5	2	4	4	6.
20	2	2	2	2	2	4	5	5	4	3	4	8	13	16	17	16	17	13	6	7	8	11	12	11	8.
21	5	7	9	11	17	19	17	13	18	17	21	27	17	16	18	18	18	20	10	9	15	12	7	5	15.
22	8	6	6	6	12	8	4	3	4	3	2	4	7	5	6	4	3	5	4	5	3	2	6	4	5.
23	4	3	4	5	4	4	6	4	5	4	4	13	18	17		6	6	6	7	9	5	6	3	3	7.
24	5	5	3	1	3	2	2	2	1	2	3	4													3.
25																6	6	5	5	4	6	3	2	2	5.
26	3	3	2	2	2	5	3	2	2	3	7	11	11	9	9	7	5	7	4	4	5	5	2	1	5.
27	3	3	3	4	2	3	3	3	3	2	3	4	6	8	10	8	9	11	6	7	6				6.
28																			4	6	6	7	12	10	8.
29	12	10	11	8	7	5	5	4	5	3	2	4	10	5	7	2	3	4	9	9	5	5	8	7	7.
30										4	3	8	11	12	14	13	12	11	7	8	12	12	10	8	10.
31	11	10	13	15	15	11	10	7	9	20	18	19	19	20	18	17	16	14	9	7	7	6	5	4	13.
MEAN	5.	5.	5.	6.	6.	6.	5.	4.	5.	6.	7.	9.	12.	11.	12.	10.	10.	10.	7.	7.	7.	6.	6.	5.	

TOTAL NUMBER OF OBSERVATIONS = 3697 MEAN = 7.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF WIND SPEED AT 100 FEET(MPH)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	3	4	4	4		3	4	3	3	4	8	10	12	10	10	9	9	7			2	2	5	2	6.
2	3	2	4	4	3	4	3	3	6	5	9	12	16	15	14			17	15	16	10	9	3	5	8.
3	4	8	4	5	4	5	3																		5.
4													7			13	14	10	7	3	1	5	0	4	7.
5	1	1	1	2	2	0	4	0	3	4	5	2	2	0	2	1	0	0	0	0	0	0	0	0	2.
6															3	4	2	2	0	0	0	0	0	0	1.
7	0	0	0	0	0	0	0	0	0	0	1	3	4	5	4	5	3	4	4	1	0	0	0	0	2.
8	0	1	0	0	0	0	0	0	1	0	2	3	6	3	1	3	2	8	4	0	0	0	0	0	2.
9	0	1	2	2	2	3	12	11	1	13	14	14	15	16	14	14	17	11	8	8	9	9	4	3	9.
10	0	3	1	1	0	1	1	4	5	5	5	2					11	8	3	1	3	1	4	7	4.
11	2	5	2	4	0	0	0	0	2	2	2	1	2	8	4	2	1	3	9	5	8	11	2	0	3.
12	0	0	0	1	1	0								1	2	1	1	1	1	3	3	3	1	1	2.
13	1	0	1	0	0	0	0	0	1	0	3	3	6	7	4	4	4	6	3	0	1	1	1	0	2.
14	0	4	5	3	4	3	3	1	1	1	2	1	4	10	12	11	8	8	5	1	5	5	1	2	5.
15	0	1	2	1	0	0	1	2	1	2	3	4	2	4	6	6	7	6	2	5	5	2	3	2	3.
16	4	2	2	2	2	2	5	3	2	3	5	5	7	10	10	7	5	5	6	3	1	2	2	2	5.
17	2	3	2	4	3	4	1	2	2	2	2	4		6	7	7	7	10	7	1	1	2	3	3	4.
18	2	1	2	3	2	2	3	2	1	2	5	6	8	8	10	11	10	9	10	4	2	3	2	2	5.
19	1	1	3	1	1	3	1	2	1	3	5	9	12	10	10	11	12	12	11	14	8	3	3	4	6.
20	3	2	3	3	1	6	7	5	5	3	5	9	14	18	19	18	20	15	9	12	13	15	14	14	10.
21	9	11	13	15	21	23	20	16	21	21	24	30	19	17	20	20	20	24	12	10	19	15	10	7	18.
22	9	6	7	8	16	11	3	3	4	3	3	4	8	6	6	5	4	6		7	2	3	7	5	6.
23	6	3	3	7	3	3	6	5	5	6	5	15	20	19		7	7	7	9	12	7	8	4	5	8.
24	6	6	3	1	4	4	2	3	2	2	3	5													4.
25																7	6	5	6	4	6	3	2	2	5.
26	2	2	2	3	4	5	2	2	3	2	8	13	12	10	10	8	6	8	5	3	3	5	3	2	6.
27	3	2	3	2	2	2	3	2	2	3	4	4	6	9	11	9	10	13	7	8	8				6.
28																			4	8	8	9	14	12	10.
29	15	13	14	11	10	7	7	5	6	2	2	4	11	5	7	2	3	6	12	12	7	8	10	9	8.
30	7	6	7	7	7	8	9	8	6	5	4	10	13	13	16	15	14	13	9	11	15	15	13	11	11.
31	13	13	16	17	18	13	12	9	11	24	22	22	23	24	21	20	19	16	11	9	9	7	6	6	16.
MEAN	4.	4.	4.	5.	5.	5.	5.	4.	4.	5.	6.	8.	10.	10.	10.	9.	9.	9.	7.	6.	6.	6.	5.	4.	

TOTAL NUMBER OF OBSERVATIONS = 7449 MEAN = 6.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF WIND SPEED AT 200 FEET(MPH)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																	4	4	6	3					5.
17														5	7	6	6	10	7						7.
18																									
19																									
20																									
21																									
22																									
23													18	20			8	7	9	14	8	9	4	4	10.
24	4	5	2	1	3	5	2	2	0	0	2	4													3.
25																6	5	4	5	2	4	2	1	2	4.
26	2	2	2	1	2	5	3	2	4	3	8	13	11	9	10	8	5	7	5	1	1	2	2	0	5.
27	1	1	1	2	1	1	1	1	1	1	2	3	5	7	10	9	9	10	6	8	8				5.
28																			4	9	9	10	15	12	10.
29	16	14	15	11	10	7	6	4	6	3	2	4	12	5	7	2	3	6	13	14	8	8	10	9	9.
30	7	6	6	6	6	8	9	8	7	5	4	10	13	14	17	15	14	13	10	13	18	19	16	13	11.
31	14	15	19	20	20	15	14	9	12	27	24	25	25	26	22	21	21	18	11	10	11	9	7	7	17.
MEAN	8.	8.	8.	7.	7.	7.	6.	5.	5.	7.	8.	10.	15.	13.	13.	10.	9.	9.	8.	9.	9.	9.	8.	7.	

TOTAL NUMBER OF OBSERVATIONS = 1945 MEAN = 9.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF TEMPERATURE AT 8 FEET(DEG F)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	43	47	45	43		40	42	53	62	72	75	76	76	76	74	72	69	63			51	49	48	47	59.
2	46	45	42	45	43	43	39	43	52	63	72	76	77	78	79			70	60	56	51	49	43	46	55.
3	46	44	46	46	46	45	43																		45.
4													51			69	65	63	59	55	52	49	46	43	56.
5	40	38	36	36	38	38	38	39	40	41	41	41	43	44	47	50	55	55	50	43	39	37	36	35	42.
6	35														54	53	51	49	45	41	38	37	36		45.
7	33	32	33	29	29	29	29	30	39	50	57	61	63	64	59	60	64	57	53	48	41	38	37	36	45.
8	34	33	32	31	31	30	30	31	40	51	60	65	66	67	69	66	62	61	55	48	43	40	39	38	47.
9	37	37	39	39	38	39	40	45	47	53	57	62	62	65	62	64	63	60	54	47	42	42	41	41	49.
10	41	41	40	39	37	35	36	37	40	50	56	55					59	55	50	46	42	40	38	37	44.
11	35	34	33	30	32	31	31	32	34	41	47	45	51	52	44	40	38	37	35	34	32	32	31	30	37.
12	29	29	29	29	30	31								53	58	59	60	58	55	53	52	50	47	43	45.
13	41	40	39	37	37	37	37	38	42	53	61	65	69	70	71	72	71	67	59	50	45	44	42	42	52.
14	42	41	39	35	33	30	28	29	38	49	56	30	65	68	69	69	66	62	53	46	44	42	38	34	47.
15	30	30	29	28	28	28	28	28	35	46	54	58	78	80		83	81	75	66	54	42	42	41	40	47.
16	39	38	37	36	36	35	34	37	41	53	61														41.
17																									
18																		67	63	58	54	51	49	47	55.
19	49	48	49	44	43	45	42	45	48	55	62	66	69	70	71	70	69	67	61	54	51	53	51	49	56.
20	49	49	47	47	46	45	46	44	46	54	61	65	66	68	68	67	66	64	59	52	50	51	50	50	55.
21	49	50	51	50	52	52	52	52	53	55	55	51	53	53	58	58	57	51	43	42	41	42	41	41	50.
22	37	37	37	36	43	42	42	41	39	38	41	46	51	54	56	56	54	52	51	48	47	45	44	44	46.
23	43	43	42	41	42	41	42	41	41	45	48	50	51	50		49	49	48	47	40	40	40	40	39	44.
24	39	40	40	40	40	38	38	38	39	40	44	46													41.
25																	53	52	48	43	39	39	38	38	44.
26	36	36	37	35	35	36	36	35	37	41	50	53	55	56	57	56	56	55	50	45	42	41	41	40	45.
27	38	39	39	36	38	37	36	35	38	42	46	49	51	51	53	52	51	48	46	45	43				44.
28																			39	38	38	38	40		39.
29	38	37	36	37	37	38	37	36	36	36	38	39	37	36	34	33	31	31	31	33	32	31	31	31	35.
30	30	29	28	27	24	26	27	27	27	28	29	32	34	35	35	36	34	32	30	29	29	29	29	30	33.
31	30	30	30	30	30	30	30	30	30	32	32	33	34	35	35	35	35	35	35	35	36	35	35	34	33.
MEAN	39.	39.	39.	37.	37.	37.	37.	38.	42.	48.	53.	53.	58.	59.	58.	58.	57.	55.	51.	46.	43.	42.	41.	40.	

TOTAL NUMBER OF OBSERVATIONS = 6815 MEAN = 46.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

CORPORATION

DIURNAL VARIATION OF TEMPERATURE AT 30 FEET(DEG F)
TRAILER NO, = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	48	51	50	48		45	46	54	62	71	74	74	75	75	74	72	70	66			59	57	53	51	61,
2	51	49	46	50	46	48	46	47	55	62	72	75	76	77	78			69	61	61	59	56	50	55	58,
3	54	51	52	52	53	52	49																		52,
4													49			65	63	63	61	57	55	51	49	47	57,
5	46	43	42	42	41	40	39	40	40	41	40	40	41	42	45	47	50	51	50	48	46	44	42	41	44,
6															49	50	50	49	48	46	44	43	41	40	46,
7	39	38	37	36	37	35	35	34	39	42	50	53	55	56	57	57	57	56	54	51	49	47	44	44	46,
8	43	39	39	38	39	38	37	38	41	48	54	57	58	59	60	60	60	59	57	54	52	49	46	47	49,
9	42	44	46	44	45	45	46	45	48	52	53	56	57	58	58	60	59	58	55	51	49	50	47	46	51,
10	47	46	45	43	45	40	41	43	42	48	52	53					58	55	53	50	48	47	41	40	47,
11	40	39	36	34	36	36	35	35	36	39	42	42	46	49	42	40	38	37	36	36	35	35	34	33	39,
12	33	33	33	31	32	32								50	53	55	56	57	56	55	54	53	51	49	46,
13	48	47	47	46	45	44	44	44	43	50	55	58	60	62	63	64	65	64	62	59	55	53	50	50	54,
14	51	48	43	41	39	36	35	35	38	42	47		56	60	60	61	61	60	57	55	53	50	47		49,
15	37	37	35	35		36	34	35	37	45	50	51	66	70			75	73	71	61	50	50	47	47	58,
16	46	45	43	42	43	43	42	43	43	51	56	59	61	62											49,
17																									
18																		68	66	63	61	59	57	53	61,
19	53	51	52	51	49	49	49	47	50	55	62	65	67	68	69	68	68	67	63	58	56	55	54	53	58,
20	53	53	51	50	51	49	49	48	48	55	61	64	65	67	67	66	66	64	61	56	57	56	54	54	57,
21	52	54	54	53	54	55	54	54	55	56	55	52	52	52	57	57	57	51	43	42	42	43	42	42	52,
22	37	37	36	36	44	43	43	43	40	38	40	45	50	53	54	54	53	51	50	48	48	46		44	45,
23	43	40	42	42	43	42	43	42	41	44	47	49	50	49			48	48	47	40	40	40	40	40	44,
24	40	41	40	41	41	39	39	39	39	40	43	45													41,
25																51	52	51	49	46	44	43	41	40	47,
26	39	39	39	39	37	39	39	39	40	42	49	52	53	54	55	54	55	54	50	48	46	45	43	43	46,
27	42	41	41	39	39	38	39	40	39	42	45	48	50	50	52	51	50	48	47	45	44				45,
28																			40	40	40	40	41	40	41,
29	38	37	37	38	38	38	38	36	36	35	37	38	35	35	34	32	31	30	31	33	31	31	31	31	35,
30	30	30	28	27	27	28	28	27	27	27	28	31	32	33	33	34	32	30	29	28	29	28	29	29	30,
31	30	30	30	30	30	29	29	29	30	31	31	32	33	34	33	34	34	35	34	34	35	34	33	34	32,
MEAN	44,	43,	42,	42,	42,	41,	41,	41,	43,	47,	50,	52,	54,	56,	54,	55,	55,	54,	52,	49,	48,	47,	45,	44,	

TOTAL NUMBER OF OBSERVATIONS = 6788 MEAN = 47,

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF TEMPERATURE AT 100 FEET(DEG F)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																		68	61	63	61	57	52	57	60.
3	55	53	55	54	55	55	52																		55.
4													47			63	62	62	61	57	55	51	49	48	56.
5	48	44	43	42	42	41	38	39	39	40	39	39	40	41	43	46	49	50	49	48	47	45	43	42	44.
6															47	48	49	48	47	46	45	44	42	41	46.
7	41	38	39	37	38	38	37	35	38	44	48	52	53	55	56	58	56	55	54	51	50	49	46	46	47.
8	45	41	41	40	40	40	39	40	42	46	53	55	56	57	59	59	59	58	56	54	48	49	47	48	50.
9	47	47	47	46	46	46	47	46	47	51	52	54		56	56	58	58	57	55	53	53	52	48	47	51.
10	47	47	46	45	46	42	41	44	43	48	50	52						54	52	51	49	49	44	41	47.
11	40	40	37	35	36	36	36	35	36	38	40	41	45	47	41	39	37	36	35	33	35	35	34	33	38.
12	33	33	33	32	32	32								48	51	53	55	55	55	55	55	53	53	50	46.
13	49	47	48	47	46	45	45	44	44	49	53	56	59	60	62	63	63	63	62	60	58	55	51	51	54.
14	51	48	43	42	40	37	35	35	38	41	45		55	58	58	59	60	59	57	56	53	53	49	40	49.
15	39	40	37	36	37	38	36	36	38	43	48	50	65	68			73	72	70	62	48	51	49	49	50.
16	49	47	44	43	44	44	44	45	44	50	54	57	59	60	61	62									51.
17																									
18																		68	64	63	61	60	58	55	61.
19	53	52	53	53	49	49	49	49	51	54	60	64	65	67	67	68	67	66	63	60	58	56	56	55	58.
20	54	54	54	52	52	51	51	50	50	54	60	62	63	65	65	65	64	63	61	58	58	56	55	54	58.
21	53	54	53	52	53	53	52	52	53	53	53	49	52	51	56	54	57	52	43	42	42	43	43	43	51.
22	37	36	36	37	44	44	44	44	43	40	41	45	50				54	53	51	50	49	48	47	45	45.
23	44	44	43	44	44	44	45	44	44	45	47	49	49	48			48	48	47	40	40	41	40	40	45.
24	41	41	41	41	41	39	40	40	40	40	43	45													41.
25																51	52	52	50	47	45	43	43	41	47.
26	40	41	41	41	39	42	41	40	41	43	49	52	52	54	55	55	55	54	51	49	48	46	45	45	47.
27	44	42	42	41	39	39	41	41	40	42	45	48	50	50	51	51	50	48	47	45	44				45.
28																			40	41	41	40	40	39	41.
29	38	37	37	39	39	39	40	38	36	36	38	38	36	35	34	32	31	31	32	34	32	32	32	31	36.
30	31	31	30	29	30	30	29	29	28	29	30	31	32	33	34	34	33	31	30	30	29	29	30	30	31.
31	30	30	30	30	30	30	29	29	30	31	32	32	32	34	33	34	35	35	35	35	36	35	35	35	33.
MEAN	44.	43.	43.	42.	42.	42.	42.	41.	42.	44.	47.	49.	51.	52.	52.	53.	54.	53.	52.	50.	48.	47.	46.	45.	

TOTAL NUMBER OF OBSERVATIONS = 6378 MEAN = 47.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF TEMPERATURE AT 200 FEET(DEG F)
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	50	51	50	51		49	49	55	59	66	69	69	70	70	70	69	68	64			57	55	56	51	60.
2	53	51	48	51	50	51	49	50	57	62	66	69	70	70	71			67	61	62	61	57	51	53	58.
3	55	52	53	53	53	53	50																		53.
4													48			64	62	62	60	57	54		47	47	56.
5	46	43	41	41	42	41	39	39	39	40	39	40	41	42	44	47	52	53	49	44	43	41	39	38	43.
6															50	50	49	47	45	44	43	41	40	39	45.
7	36	36	36	35	36	35	34	36	41	48	53	56	57	58	58	61	59	56	53	49	47	44	43	42	47.
8	43	40	39	38	36	36	35	35	43	50	56	59	60	61	63	63	60	59	55	51		47	45	43	49.
9	43	45	45	44	44	45	46	47	49	52	53	55	56	58	56	59	58	57	54	53	53	51	48	46	51.
10	45	45	44	43	42	42	41	42	44	49	52	53						54	51	48	47	47	44	41	46.
11	39	38	38	36	35	34	35	35	36	39	44	43	47	49	42	40	37	34	36	34	35	34	34	33	38.
12	32	32	31	32	32	33								51	55	56	57	56	55	54	54	53	51	47	46.
13	46	44	43	44	43	41	42	43	47	54	59	61	63	64	66	67	67	65	61	57	55	51	50	48	54.
14	46	47	44	41	39	36	35	35	39	45	51		59	61	62	63	63	60	56	52	50	50	49	38	50.
15	37	35	34	35	33	32	33	35	40	46	51	54	69	73				74	68	60	52	48	46	45	48.
16	45	46	44	41	40	41	42	44	46	53	58	61	63	64	65										50.
17																									
18																		68	65	61	57	55	52	50	58.
19	48	50	51	50	48	47	46	45	49	57	62	66	67	68	70	69	68	66	63	61	59	54	51	51	57.
20	51	51	52	52	48	47	49	49	52	57	62	64	65	65	66	66	64	63	61	58	57	56	55	54	57.
21	53	53	52	52	53	53	52	51	52	54	53	49	52	51	57	57	56	51	42	41	40	42	42	43	51.
22	37	36	36	37	44	44	44	44	44	43	44	47	51	53	56	55	54	52	51	49		46	46	45	47.
23	44	43	42	43	44	44	44	44	44	45	47		50	49			47	47	46	39	39	39	39	39	44.
24	40	41	41	40	40	40	38	40	40	41	45	49													42.
25																53	52	52	49	46	44	42	39	39	46.
26	39	39	38	38	37	39	39	38	41	46	50	53	54	55	57	55	56	54	51	47	45	44	43	41	46.
27	41	41	41	40	39	38	37	36	41	46	47	50	52	50	52	51	50	48	46	45	43				45.
28																			39	40	40	40	40	39	40.
29	38	36	37	39	40	40	40	39	37	37	38	39	36	34	33	33	32	31	31	32	31	30	31	31	36.
30	31	29	29	29	28	29	29	28	28	30	30	33	34	34	35	35	34	31	30	29	29	29	29	29	31.
31	30	30	30	30	29	29	29	29	30	31	31	33	33	34	33	34	35	35	35	35	35	35	35	34	33.
MEAN	43.	43.	42.	42.	41.	41.	41.	41.	44.	48.	51.	53.	55.	56.	55.	55.	54.	54.	51.	49.	47.	46.	45.	43.	

TOTAL NUMBER OF OBSERVATIONS = 6774 MEAN = 47.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 8 FEET
TRAILER NO. + 23 PERIOD(10/ 1/74 TO 10/31/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	21	22	22	22		24	24	23	20	19	18	18	19	19	18	18	18	18			20	21	21	22	21.
2	23	23	22	23	24	24	23	25	24	22	20	20	20	20	20			19	17	19	19	20	19	21	22.
3	21	20	22	23	23	24	23																		23.
4													44			35	37	38	41	46	50	64	77	81	52.
5	83	85	86	89	90	91	91	93	92	92	91	92	90	90	87	83	73	67	71	79	84	86	88	89	86.
6	90														35	32	30	32	35	42	45	47	48		42.
7	52	55	54	58	61	61	62	61	52	38	30	27	25	25	30	29	23	25	25	29	32	36	37	38	41.
8	39	40	41	41	42	43	44	44	39	32	26	21	20	20	19	19	20	21	22	25	29	32	34	36	32.
9	37	37	38	38	40	40	41	38	37	34	34	31	30	29	29	25	24	25	28	31	37	39	41	40	35.
10	40	40	41	42	43	46	47	47	49	44	34	34					25	30	34	37	39	37	38	43	40.
11	50	53	62	64	68	73	79	80	79	70	58	59	52	46	54	69	77	82	84	85	86	87	88	88	71.
12	89	89	90	90	90	91								78	72	69	65	67	71	74	77	79	80	84	80.
13	87	88	89	89	90	90	90	90	89	79	59	45	35	32	29	28	27	28	32	40	46	48	50	52	60.
14	53	53	56	61	67	71	80	86	81	62	51	41	39	31	26	24	25	25	23	33	35	37	41	43	48.
15	44	43	43	44	44	44	44	44	40	33	26	23	23	20	20	22	21	22	24	26	30	31	32	33	33.
16	34	34	35	37	38	37	39	37	36	31	25									28	29	29	29	30	33.
17	32	30	30	30	34	36	34	35	34	30	27	28	27	26	25	24	24	24	26	28	30	31	31	31	30.
18																		20	20	22	23	25	25	27	24.
19	25	25	26	27	28	28	30	29	28	28	26	23	22	21	21	20	20	20	20	23	24	25	26	27	25.
20	25	26	27	28	29	30	30	31	31	28	25	22	21	21	21	21	20	20	21	24	25	25	27	27	25.
21	28	25	25	26	27	27	28	29	30	31	31	41	39	47	39	38	37	43	79	85	91	87	87	87	47.
22	94	97	98	76	91	86	87	87	91	95	94	89	69	62	53	49	51	55	59	67	72	81	82	82	78.
23	86	85	85	86	84	85	81	83	84	80	76	68	65	65		71	68	68	70	81	87	88	88	89	80.
24	89	88	89	88	88	89	89	88	90	88	83	77													88.
25																60	58	57	63	71	78	80	81	82	71.
26	84	81	80	77	77	74	76	77	75	73	63	51	46	43	39	38	36	38	48	53	58	61	63	64	62.
27	68	69	69	72	72	73	74	75	74	68	62	57	51	50	47	49	49	55	59	62	65				63.
28																			76	77	76	73	72	74	75.
29	78	83	83	81	80	78	78	81	83	84	80	81	85	85	85	87	91	93	94	91	93	93	91	91	86.
30	87	85	88	89	92	90	89	89	87	88	88	82	79	76	71	67	68	82	82	83	83	84	84	84	84.
31	83	82	81	83	82	82	82	82	81	79	79	79	80	80	79	79	80	81	83	83	83	84	85	84	82.
MEAN	57.	57.	57.	58.	61.	60.	60.	61.	60.	56.	51.	49.	45.	45.	43.	44.	43.	44.	49.	52.	54.	55.	56.	58.	

TOTAL NUMBER OF OBSERVATIONS = 7168 MEAN = 53.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT .

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 30 FEET
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	21	22	22	23		23	24	24	22	21	21	21	20	20	20	20	20	21			21	21	22	22	22.
2	23	23	23	24	25	25	24	25	24	23	22	21	21	21	21			19	19	20	20	20	20	21	22.
3	21	20	22	23	23	24	24																		23.
4													46			39	40	40	42	47	51	65	77	80	53.
5	79	84	87	89	91	93	96	98	98	96	97	98	97	96	93	89	81	76	77	82	85	86	89	92	90.
6															41	35	32	32	34	36	38	40	43	46	38.
7	47	47	48	51	49	52	51	55	50	44	37	34	31	29	28	27	27	27	27	28	29	30	33	33	39.
8	33	35	36	36	36	36	37	38	38	36	30	25	23	23	23	23	23	23	24	25	26	29	30	31	30.
9	32	33	33	36	36	37	38	38	39	37	39	38	37	35	34	29	27	28	30	33	36	35	33	39	35.
10	37	38	40	41	39	44	45	44	51	49	41	40					28	33	37	39	38	35	41	46	41.
11	55	59	63	69	70	74	77	80	81	78	75	74	66	58	64	76	85	93	92	90	91	90	92	95	77.
12	95	95	95	96	96	97								89	86	82	77	76	77	78	80	81	83	87	87.
13	86	85	81	82	84	85	84	84	88	81	71	56	45	39	35	33	31	30	32	35	38	41	45	46	60.
14	46	49	55	59	62	69	73	76	74	70	65	48	48	38	31	27	27	27	28	28	30	33	36	37	48.
15	37	35	37	38	37	36	38	35	38	34	29	27	26	23	23	23	23	23	24	25	27	28	30	30	31.
16	31	32	33	34	33	33	34	32	34	33	28	26	26	24						28	27	28	30	30	31.
17	31	32	32	32	35	37	36	35	37	33	30	29		26	25	24	24	25	26	27	27	28	31	32	31.
18	32	33	32	35	35	35	39	38	38	35	31	29	28	26	25	24	24	24	24	24	25	25	27	28	30.
19	28	28	28	28	30	30	30	31	30	30	28	26	25	24	23	22	22	22	22	24	26	27	28	28	27.
20	28	28	29	30	31	33	33	34	35	32	28	24	24	23	24	23	23	23	24	26	27	28	29	30	28.
21	30	27	28	29	29	29	31	33	34	34	35	45	45	50	41	39	38	45	80	87	92	87	87	87	49.
22	97	99	100	100	87	82	76	81	86	95	97	90	66	58	49	45	47	50	55	64	67	74	75	78	76.
23	85	85	85	84	82	82	78	80	83	78	74	66	63	64		69	66	68	67	83	89	89	89	90	79.
24	90	87	89	88	87	90	89	88	89	89	84	77													88.
25																61	57	56	61	67	71	74	77	79	67.
26	82	79	78	73	73	69	69	70	69	69	61	49	44	40	36	36	34	35	46	51	54	56	61	61	59.
27	63	67	67	69	70	71	70	69	71	68	62	57	50	49	46	48	48	55	59	63	66				62.
28																			77	76	76	72	71	73	74.
29	78	84	84	81	80	78	77	82	85	87	84	83	88	87	89	93	98	100	100	94	96	97	95	94	89.
30	89	86	87	89	88	85	85	86	85	84	87	80	75	72	67	62	70	81	81	81	81	82	82	82	82.
31	82	81	80	81	81	81	82	81	80	78	78	77	79	79	78	78	79	81	84	84	83	85	86	85	81.
MEAN	54.	55.	55.	57.	58.	58.	56.	58.	59.	57.	54.	51.	47.	46.	45.	45.	45.	46.	50.	51.	53.	53.	56.	57.	

TOTAL NUMBER OF OBSERVATIONS = 7380 MEAN = 53.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 100 FEET
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	19	20	20	20		21	21	22	22	21	20	20	20	20	19	19	19	20			21	21	21	21	21.
2	21	21	20	21	22	22	21	21	22	23	22	21	21	21	21			19	18	19	19	19	19	20	21.
3	20	19	20	21	22	22	22																		21.
4													45			38	39	38	40	46	50	62	76	78	52.
5	75	82	85	90	92	94	98	100	100	100	100	100	100	100	96	91	82	76	76	78	82	85	88	90	92.
6															40	33	30	30	30	32	34	36	39	41	35.
7	41	44	43	46	44	45	46	48	47	42	35	32	29	28	25	26	26	25	25	25	26	27	29	29	35.
8	28	30	31	31	32	31	33	33	33	34	28	23	21	21	21	21	22	21	22	23	27	26	28	28	27.
9	28	29	30	31	33	34	35	35	37	36	39	37	38	35	34	29	26	27	28	30	31	31	35	36	33.
10	35	35	37	38	36	40	42	40	49	48	41	40					29	33	36	37	35	32	37	46	39.
11	56	59	62	69	71	74	78	80	81	80	77	76	67	58	62	73	84	92	90	86	87	87	91	92	76.
12	93	94	94	94	95	97								89	86	82	77	75	75	74	74	78	76	82	85.
13	83	83	76	77	78	80	82	80	81	80	69	54	43	36	33	31	29	28	29	32	33	36	40	42	56.
14	42	45	52	56	60	67	73	77	75	72	66	53	48	37	29	25	25	25	25	26	28	29	31	32	46.
15	32	32	31	33	33	31	33	31	30	31	27	25		21	21	22	21	21	23	22	24	25	26	25	27.
16	25	27	29	31	30	29	30	29	30	31	26	25	26	23	23	25	25		25	27	27	27	28	28	28.
17	30	31	30	30	33	34	34	34	34	33	30	30		27	26	25	25	25	26	27	28	28	29	30	30.
18	31	31	31	33	33	33	38	36	35	34	31	30	28	26	25	24	24	23	23	24	25	25	26	26	32.
19	27	27	27	26	28	28	28	29	28	29	28	26	25	24	23	22	22	22	22	24	25	26	26	27	26.
20	25	27	27	28	29	30	31	31	31	30	27	25	24	23	24	23	23	23	24	26	26	27	28	28	27.
21	28	26	27	28	28	29	30	32	34	34	37	48	48	53	44	41	39	46	81	88	93	86	81	85	49.
22	97	99	100	100	88	78	76	74	76	88	92	85	64	55	47	43	44	47	52	59	62	67	68	75	73.
23	81	76	81	78	77	77	73	74	76	75	72	65	61	63		66	66	65	67	81	88	86	88	88	76.
24	86	83	85	85	85	86	87	85	85	88	84	77													85.
25																56	53	51	56	61	65	69	72	75	62.
26	78	69	68	61	61	57	59	62	59	60	53	43	38	35	31	31	28	30	40	45	47	50	53	54	51.
27	55	59	59	60	64	65	63	62	63	63	59	52	46	44	42	44	43	51	55	59	63				56.
28																			72	70	69	65	66	69	69.
29	75	82	80	74	73	72	70	75	82	85	82	81	87	86	87	94	98	100	99	88	91	92	86	85	85.
30	80	79	79	80	78	77	77	77	78	77	79	73	69	66	60	55	64	77	76	75	76	77	78	78	75.
31	77	76	76	76	76	76	78	77	76	74	73	73	76	75	74	74	75	77	80	81	79	82	83	81	77.
MEAN	51.	52.	52.	34.	55.	54.	53.	54.	55.	55.	52.	49.	47.	45.	42.	43.	43.	45.	47.	49.	50.	50.	52.	54.	

TOTAL NUMBER OF OBSERVATIONS = 7419   MEAN = 50.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

CORPORATION

DIURNAL VARAITON OF RELATIVE HUMIDITY AT 200 FEET
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	26	27	28	28		28	28	28	27	27	26	26	26	26	25	25	25	26			27	28	27	28	27.
2	28	28	27	29	29	29	28	29	29	28	28	27	27	27	27			24	24	25	25	26	25	27	27.
3	27	25	27	28	29	30	29																		28.
4													52			45	46	46	48	52	57	70	83	86	59.
5	85	88	94	100	100	100	100	100	100	100	100	100	100	100	100	98	85	77	80	89	94	97	100	100	95.
6															43	39	37	38	40	42	44	47	49	50	43.
7	54	55	55	57	56	57	58	57	50	45	38	36	34	33	32	32	31	32	32	33	35	37	38	39	43.
8	38	38	39	40	42	43	45	47	41	38	34	29	28	28	28	27	29	28	30	31	35	35	37	39	36.
9	39	37	39	41	42	43	43	42	42	42	44	43	42	40	40	35	33	35	36	37	38	39	41	42	40.
10	43	43	45	46	47	48	49	49	53	49	45	44					36	40	43	46	46	41	43	54	46.
11	64	69	69	73	77	86	92	91	91	85	76	76	69	62	66	75	89	100	100	97	100	100	100	100	83.
12	100	100	100	100	100	100								91	84	81	77	79	81	81	80	82	84	91	89.
13	96	96	95	92	92	95	96	94	88	77	66	54	45	40	38	36	35	35	38	42	44	46	49	52	65.
14	55	55	59	63	68	76	81	85	81	73	64		50	41	35	32	33	33	34	36	39	40	40	42	53.
15	41	41	42	43	44	45	44	41	38	36	34	32	33	29	29		27	29	31	32	33	35	36	36	37.
16	37	37	38	40	42	41	39	39	37	36	33	32	33	31	31		37	32	33	34	34	35	35	35	36.
17	36	35	36	36	38	40	40	40	40	39	38	37		34	33	32	32	32	34	35	37	38	38	39	37.
18	40	41	41	41	43	43	45	45	41	38	36	35	34	33	31	31	30	30	30	31	33	34	34	35	37.
19	36	35	35	35	36	37	37	38	37	35	34	32	32	31	30	29	29	29	29	31	32	34	35	35	34.
20	35	35	35	36	38	40	39	39	37	35	33	31	31	31	31	31	30	30	32	33	34	35	35	35	35.
21	35	33	34	36	36	36	37	40	40	40	42	53	53	58	51	48	48	53	69	98	100	98	96	95	57.
22	99	100	100	100	91	86	87	85	85	87	88	85	72	65	54	51	53	56	60	67	75	78	79	83	79.
23	87	89	90	88	85	85	83	82	83	83	80	72	69	70			75	75	76	89	97	97	96	98	85.
24	97	94	95	96	96	95	97	94	95	94	88	77													94.
25																64	64	63	68	74	81	86	91	95	77.
26	94	88	87	81	80	79	79	80	76	69	64	56	51	47	43	44	42	44	54	60	65	68	70	73	67.
27	75	76	77	76	78	81	82	84	78	70	66	61	56	57	54	56	57	65	68	73	76				70.
28																			86	84	81	79	79	83	82.
29	88	93	92	86	84	84	83	85	90	91	90	90	96	98	98	100	100	100	100	99	100	100	99	98	94.
30	96	97	97	96	97	96	94	94	94	90	91	83	79	77	72	69	76	88	88	89	89	90	91	91	89.
31	90	89	89	89	89	90	91	91	90	88	87	86	88	87	87	87	89	91	93	94	92	94	95	94	90.
MEAN	61.	61.	62.	63.	64.	64.	63.	64.	63.	60.	57.	55.	53.	52.	49.	51.	50.	52.	56.	58.	60.	60.	62.	64.	

TOTAL NUMBER OF OBSERVATIONS = 7417 MEAN = 59.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                         DIURNAL VARIATION OF WIND DIRECTION
                    TRAILER NO. = 20  PERIOD(10/ 1/74 TO 10/31/74)

                                          HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1    89 117 127 132 132 114  96  97 129 131 112 308 304 322 329 304 299 293 328 113 128 102 105  95  99.
  2   100  97  91 108 101 101  92  96 131 137             213 246 204 195 187 194  98  78 121 114  94 127.
  3   105  85  93 102  81  63  72  93 109 115 162 161 187 206 201 128 177 142  99 119 100 111 107 175 123.
  4    87  75 128 117 344  62  72 101 104 333 260 290 290 298 280 242 214 174 120 313  58 333  83 115  65.
  5    94  85  97  87 111 129 360  88 121 270 310 271 276 229  70  85 127 106 348  85  83  93  82  97  89.
  6    88  89  98  66  67  75 156 330  26 114 154 293 274 270 280 289 313 290 350 100 104 105 105 106  70.
  7   111 116 114 105 108 118 108 113 102 154 289 283 284 279 301 284 274 285   4  92  98 102 106 121 111.
  8   111 104 115 117 111 109 107 109 115 139 323 315 226 149 313 100  61 350 358 116  99  98 101  98 100.
  9   110 113 128  85  95 117 128 122 106 108 201 104 203 211 215         241 201 137  81 108 105  97 136.
 10   101  96 107 105 103  87  78 117 112 121 103 117  44 311 322 214 311 290 342  86  95  98  67 318  85.
 11   117 107  72  83 126  84 104 105  90  45 322 322  93 102  46  93  62  91 110  97 104  26  24  97  82.
 12   110  77  76  77  90  90  90  37   4 302 265 268 281 321 298 272 267 179 185  59  68  71  37  92  50.
 13    86  99 100  98  93  97 103  96  95 116 303 280 350 347 306 274 272 341  50 110  92 117 113 115  80.
 14   113  83  93 103 106  95  95 100  95  92 329 280 271 304 321 322 300 309  13  95 112 111  99 106  74.
 15   113 105  97  95 105  85  93  97  93 131 318 291 285 273 271 282 288 303  60  93  88 102  92  87  85.
 16   103  88 107 107  99  96  93 120 132 122 278 316 345 337 339  10  37  97 100  95 101 101  95 101  84.
 17   107 103  99  90 107  99 110 139 129 301 276 275 276 269 268 317  21 117 104 106 108 111 120 114 110.
 18   105 102 109 112 109 107 120 129 102 286             271     299 348 339  37 109  75 101 102 101  93.
 19   107  97 106 107 104 101 107 105 102 127 239 304 202 274 279 250 254 244 111  82  93  98  96 105 123.
 20   107 107  93 109 116 113  89  83 119 125 105 260 251 227 210 220 201 242 157  91  90  95  85  91 128.
 21   116 127  97 110 100  87  81  82 119 144 190 146 168 161 161 147 135 354  99 116  90  75  86 281 118.
 22   252 271 137 120 137 311 318 324 351 304 331  71 302  86  21 354 323  37 342  48  67  73  74 103  15.
 23   111 101 113 126 126 113 124 129 134 139 337 201 164 168 233 201 271  28 310  71 110 111  84  97 126.
 24   104  93  66  97 114  91 105 112 127 140 285 310 360  24  11 351 312 320 360 325 301  41  84 110  49.
 25   109 111 114 114 115 109 123 112 128  62 308     270 275 267 272 270 276  16 106  61  93 100  89 104.
 26    97 101  95  91  91 112 104 101  84 124 112 166 228 202 280 293 317 350  37 110 103  90 108 110 104.
 27   122 114 107 114  95  96 109  95 109 133 292 275 276 267 343 347 300 287 299 288 311  63  87  81  55.
 28    80 118 107 119 126 128 130 128 131 123  90 197 189 174 176 226 234 148  84  69 118 126 110 113 132.
 29   113 109  80  61  96 323 318 335 345 119  56     280 328 287 329                                  16.
 30   110  95  98 124  69 117 117 119 112 109 126  70 239 218 212 269 206 175 118  87  99  81  81  86 119.
 31   115 116  93  50  91 100  91 105 106 111 210 191     217 222 205 206 259 239  76 110  85 104 113 130.

MEAN  106,102,270,270,103, 98, 99,101,105,121,279,266,263,258,281,275,276,286, 48, 92, 92, 93, 94,103,

                    TOTAL NUMBER OF OBSERVATIONS =  8653     MEAN  =  102.

             * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. = 21 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	95	163	39	10	82	106	347	81	322	298	304	295	292	330	281	267	220	250	301	99	101	108	108	106	9,
2	117	69	22	71	83	97	86	339	327	294	297	294	246	214	188	160	160	146	137	136	134	141	155	170	136,
3	155	171	172	328	60	103	124	129	336	324	157	167	161	167	160	151	161	130	136	145	115	129	131	128	141,
4	138	127	137	145	137	143	69	159	153	178	90	274	232	274	265	276	228	169	145	331	351	138	129	120	160,
5	124	131	129	137	114	127	141	116	100	338	343	332	311	317	294	315	337	335	360	136	134	136	136	135	96,
6	145	146	133	131	152	166	145	147	147	105	342	334	316	317	318	322	319	332	120	127	128	132	141	138	132,
7	150	163	124	98	137	122	117	139	120	340	338	328	327	353	313	301	329	330	335	112	130	126	136	151	95,
8	147	131	129	149	154	93	113	61	14	350	325	317	333	330	347	318	322	335	335	72	135	135	137	154	58,
9	153	154	141	148	133	134	155	155	149	321						200	225	167	138	138	134	145	157	152	155,
10	121	144	150	122	84	101	134	167	112	299	321	339	345	255	102	344	318	295	108	133	131	147	317	106	111,
11	132	137	134	130	124	135	124	158	134	77	58	163	138	61	137	129	124	141	122	136	117	152	298	129	128,
12	129	139	140	127	141	171	92	22	358	353	327	300	259	204	147	235	211	220	201	145	130	117	122	113	153,
13	124	124	132	134	140	161	143	66	100	46	319	309	315	302	338	296	297	330	360	122	123	129	152	119	100,
14	162	93	128	136	147	136	128	133	137	93	360												151	143	129,
15	125	30	101	49	99	124	74	114	36	337	330	328	318	304	317	340	326	324	53	130	130	158	153	161	52,
16	101	39	122	140	145	126	40	31	125	136	323	330	317	324	302	307	309	338	328	72	124	137	141	141	65,
17	159	147	171	42	83	120	124	111	122	92	326	331	334	333	329	322	324	323							46,
18																								154	155,
19	141	158	121	23	130	116	126	34	92	357		338	333	274	233	215	179	171	144	133	136	170	169	161	145,
20	168	174	186	41	145	183	155	148	162	359	342	109	156	169	170	172	174	166	138	139		174	177	173	159,
21	170	160	161	152	145	143	123	145	108	164	158	151	164	149	161	155	160	343	63	137	150	9	348	342	142,
22	341	314	261	165	283	344	334	324	332	7	227	131	133	112	194	47	79	47	315	127	80	123	133	136	58,
23	160	122	87	124	152	128	144	149	190	333	342	116	161	169	167	134	158	200	186	124	138	124	94	131	142,
24	147	157	163	161	358	41	344	5	270	320	326	339	313	341	350	336	342	336	331	325	273	306	144	138	331,
25	142	153	143	162	89	122	90	94	114	128	243	358	333	335	330	322	327	321	334	31	136	127	139	142	96,
26	121	151	80	51	101	94	100	131	36	14	339	332	336	167	97	121	340	348	339	53	125	130	148	148	82,
27	145	158	158	112	138	133	43	91	121	332	332	326	336	335	334	340	315	308	335	105	139	128	121	134	77,
28	129	170	31												173	199	179	154	119	136	147	82	38		137,
29	97	140	132	124	60	56	108	275	102	98	125	124	9	4	294	31	133	149	190	139	116	117	133	144	112,
30	120	120	123	138	104	115	136	157	100	119	182	265	182	169	195	179	143	145	116	114	109	111	115	108	136,
31	126	124	129	144	137	137	144	132	129	140	150	155	166	160	143	122	141	97	110	131	119	112	114	111	133,
MEAN	136,	139,	131,	117,	119,	122,	111,	114,	106,	13,	327,	319,	297,	288,	249,	272,	246,	292,	87,	118,	127,	130,	135,	138,	

TOTAL NUMBER OF OBSERVATIONS = 8153 MEAN = 125.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                         DIURNAL VARIATION OF WIND DIRECTION
                   TRAILER NO. = 22  PERIOD(10/ 1/74 TO 10/31/74)

                                              HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1      88  90  90  91  90  93  91  95  84  92         275 274 268 265 270 268 302  82 105  99 102 113  94
  2     114 117 115 112 115 113 117 111 107 112  99 258 263 265 181 244 254 217 114 119  38 107 106 103 129
  3     105  97 109 104  97 104 110 107 105 105 120 132 120 156 188 109 158 109  99 163 104  92 113 109 117
  4      88 105 119 106 103 121 145  38  21 299 270 273 295 292 296 265 242 248 131  58 303 183         216
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 23                                                 273 135 128 152 197 282 288 124 317  86 109  93  91 135
 24     104 111 104  73  98  86  89  66  90 105 103 231 304  87 353 326  10 307 286 100  85  50  61  85  72
 25     106 101 113  93  81  87  83  78  91  96 249 288 288 292 279 269 264 265 353  85  18  65 104 116  75
 26     111 115 115 109 111 118 114 114 112 111 100 182 256 233 137 273 283 112  84  86  82  77 100 110 116
 27     113 114 111 113 104  72 116 119 118 108  90 281 270 296 313 301 282 268 272 277 318  76  84  88  91
 28     106 118 100  89 105 104 116 106 112 106  95 312 249 139 133 174 171 287 110  83 111 108 106 109 116
 29      82 102 107   4  96 111 283 333 282  84 107 275 276 302 270 104 162  97 121  99 106 100 107 109  98
 30     104 108 109 113 103 108  79  40  73  93  97 242 213 236 159 136 120 111  97  89 351   9 111  99 105
 31      88  93  83  88  69  85 107 109  67 102 116  42 255 240 243 297 300 313 295  89  98 101  82 100  86

MEAN    101,106,107, 95, 98,101,107, 86, 90,100,110,262,259,247,225,246,249,260, 98, 90, 67, 90, 98,103,

                    TOTAL NUMBER OF OBSERVATIONS =  3531     MEAN  =  106,

            * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                          DIURNAL VARIATION OF WIND DIRECTION
                     TRAILER NO. = 24  PERIOD(10/ 1/74 TO 10/31/74)

                                           HOUR
      1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

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MEAN  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
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                  DIURNAL VARIATION OF WIND DIRECTION AT 8 FEET
                  TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                              HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1   114 195 187 227     216  98  73  20 288 347 358 335 344 326 309 321 298         232 221 195 316 293.
 2   184 143 157 237 189 263 190 191  95  65 221 225 226 231 210         224 206 212 219 165  63 112 192.
 3    35 287  56  69  89 112  54                                                                      62.
 4                                                   272         211 209 200 200 256 215 203 136 163 206.
 5   213 242 215 213 163 202 250 264 290 303 305 285 304 264 335 340 328  29 169 216 225 227 212 143 250.
 6   188                                                     296 312 324 301 236 218 219 194 209     247.
 7   227 237 219 198 197 226 279 230  81   6 350 325 346 348 346 325 324 294 340 195 223 212 107 230 271.
 8   222 215 123 224 234 211 163 198  56  53  46 327  21  96  26 348 353 325 318 218 213 209 153 233 225.
 9   183 212 126  94  96 146 169 171  72 197 200 203 213 210 208 230 224 229 223 221 222 211 231 276 197.
10    90 255 109 156 224 227 165 198 168 101 230  13                 221 300 269 205 191 151 238 259 202.
11   227 167 260 226 165 211 222 182 244 304 335 333  54 139  25  12 329  94 169 167 130 124 302 167 199.
12   210 225 226 214 235  89                             322 304 330   5 293 238 212 210 177 243 215 241.
13   222 235 224 178 220 161 232 256 269  47 307 330 351 301 314 307 331 339 338 219 182 252 205 279 264.
14   218 249 253 232 260 250 231 207 224 357  10 333 317 337 351 343 326 341 278 205 174 216 231 205 266.
15   193 220 226 169 203 244 246 222  85  84  39   9  22 325 355 343   7 329 228 232 285 326 174 141 264.
16   121 254 262 175 217 244 159 240 215  65  96 111 164 340 349 352  15 339 329 218 238 228 214 240 232.
17   211 275 210 290 238 202 179 249 115  80  93 329 334 301 309 327 338 341 341 219 220 213 202 117 257.
18                                                                       335     228 225 205 227 197 227.
19   237 149 183 242 224 191 228 176 165  88  36 223 223 251 268 269 264 220 220 229 259 256 139 146 215.
20   160 161 355   4 107 132 130 115  74  58 275 240 243 229 231 225 232 227 227 224 217 197 185 185 196.
21   174 208 193 201 203 198 192 192 193 188 207 191 204 205 207 184 191 258  59 144 146 145 194 192 189.
22   283 238 313 136 177 181  24 157 236 322 192  30 199 243 229 192 249  11 322 281 216 208 225 159 228.
23   162 132 109 171 186 200 171 113 101 121  43 181                                                 144.
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MEAN 193.215.270.270.196.199.191.195.138. 51.344.308.289.281.306.306.305.303.257.216.213.204.199.195.

               TOTAL NUMBER OF OBSERVATIONS =  5427    MEAN  =  223.

        * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF WIND DIRECTION AT 30 FEET
TRAILER NO. - 23 PERIOD(10/ 1/74 TO 10/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	125	162	148	199		198	79	75	17	288	343	354	342	342	323	306	322	302			212	200	154	312	304,
2	190	91	135	233	134	183	191	145	101	71	210	214	215	218	199			214	205	194	193	155	76	122	172,
3	26	165	73	72	90	103	75																		85,
4													269			201	198	190	193	256	233	202	109	143	201,
5	168	249	208	211	159	192	238	250	271	295	300	283	295	261	331	347	343	30	91	157	199	215	217	99	242,
6															293	313	322	295	237	200	215	140	185	104	239,
7	293	276	200	164	145	260	146	305	97	360	352	322	328	325	330	323	334	294	337	230	194	181	4	272	295,
8	218	201	123	223	15	215	147	162	60	43	42	326	15	79	21	343	353	322	332	218	200	105	95	199	71,
9	153	193	107	86	109	112	160	156	65	181	186	189	201	197	197	215	211	219	210	192	186	173	204	264	177,
10	72	244	96	135	185	242	167	163	159	98	225	9					211	200	269	169	164	140	216	257	185,
11	220	144	240	236	138	195	214	171	232	317	347	332	50	129	21	24	316	83	155	168	111	119	353	140	158,
12	177	233	215	217	234	248								319	318	338	5	295	243	204	190	164	223	206	235,
13	219	193	186	147	354	98	216	239	328	43	305	332	351	306	301	307	331	340	348	197	144	297	179	341	294,
14	183	262	258	248	273	272	240	196	206	360	356	334	315	336	350	342	325	340	312	156	139	177	198	159	272,
15	148	197	204	140	132	20	330	200	80	79	34	10	17	326	353	342	3	337	234	193	167	343	161	96	55,
16	111	256	253	158	75	218	118	202	198	69	82		331	334					314	203	209	190	130	228	188,
17	233	329	175	71	250	220	161	245	105	89	114	345		297	305	317	329	335	344	223	205	176	194	64	251,
18	270	129	219	208	147	236	246	223	334	328	309	298	297	308	312	332	325	325	336	252	211	186	224	139	267,
19	292	105	150	242	215	190	213	33	173	75	24	212	212	238	253	256	254	209	204	208	234	11	127	137	207,
20	148	158	267	321	77	113	122	104	79	53	273	226	228	216	217	211	219	215	217	203	194	178	166	163	166,
21	159	189	180	188	189	183	176	175	177	171	194	174	190	194	196	171	178	245	47	128	132	129	183	98	172,
22	278	233	292	122	163	224	360	131	201	321	181	5	194	231	221	172	236	359	322	298	210	206	212	147	225,
23	145	109	103	166	165	190	160	106	86	104	32	204	191	175		214	209	207	191	205	134	151	87	108	153,
24	150	153	83	88	153	195	158	109	169	29	38	1													118,
25																302	297	290	284	231	227	208	242	325	267,
26	224	253	120	209	56	165	86	248	185	16	193	214	205	204	214	240	225	258	308	223	213	221	112	278	213,
27	214	209	122	223	229	58	176	177	246	35	309	299	312	301	337	334	306	301	283	246	211				266,
28																			128	174	142	152	165	154	153,
29	169	149	159	161	132	156	138	235	302	78	324	278	251	242	278	218	128	91	104	176	109	110	155	169	166,
30	199	199	199	199	199	199	199	199	199	180	132	205	209	209	211	214	209	197	187	197	196	201	195	199	197,
31	185	202	201	199	192	196	195	190	192	213	211	211	213	214	217	217	218	222	229	231	218	200	198	220	207,
MEAN	187,	193,	270,	270,	156,	192,	170,	182,	160,	46,	328,	290,	265,	259,	285,	283,	281,	281,	257,	204,	188,	174,	172,	165,	

TOTAL NUMBER OF OBSERVATIONS = 7393 MEAN = 203,

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT.

CORPORATION

```
              DIURNAL VARIATION OF WIND DIRECTION AT 100 FEET
              TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                    HOUR
           1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1      188 164 103 121     220  34  91   9 282 330 342 329 329 307 294 311 302         188 160 157  97 307.
  2      161  73 112 264 151 161 189 138 112 106 202 204 205 209 188         205 186 181 170 163  80 140 165.
  3      216 182  82 114 102 110 183                                                                     139.
  4                                                  255         191 188 177 187 256 272 193  87 106 195.
  5      117 264 228 210 167 185 235 237 256 284 289 274 287 248 315 352 336  22  57  49  84 331 241 114 268.
  6                                                          285 302 311 288 270 266 256 184 210 108 263.
  7       22  43 151 181 133 326 274 304  61 348 347 317 320 311 315 299 323 285 327   4 199 195  12  96 329.
  8      125 187  29 249 357 271 278  56  77  41  33 301   6  74 351 332   4 309 328 257 200 194  49  77 358.
  9       72 140  96 100 130 116 156 171  47 168 173 177 189 184 187 204 200 205 200 182 174 159 169 191 163.
 10      152 210  70 109 145 253 184 146 159 105 214 359                 208 270 264 133 127 136 234 250 176.
 11      228 108 233 246 118 203 262 185 218 275 328 317  36 118   6  27 296  66 141 141  93  98  20  57 121.
 12       75 110 218 226 230 246                             307 302 324   5 279 232 197 189 151 179 218 229.
 13      261 226 182 178  35  14 351 239 265  43 296 325 329 299 309 301 327 331 358 126 149 320 181 336 307.
 14      108 278 261 258 279 293 255 215 198 354 337 328 303 326 338 330 314 329 336  45 113 133 142 152 300.
 15       40 153 233 342  14  69  53 195  43  70  21 360   4 305 342 333 354 329  58 142 156  27 196  32  24.
 16      111  95 306 305  74  63 109  96 246  73  78  36 321 326 336 337   4 331 348 232 133 283  33 256  12.
 17        8  10  87  99 317 259 110 302 122  85  78 329     292 298 316 322 331 355  32  85 133 223  20   9.
 18      332  57 156 242  50 190 349  24  41 326 306 296 292 300 306 324 317 317 334  10 222 215  99 173 320.
 19       33  14 101 129 209 196 260  31 357  60  63 210 209 230 247 252 249 202 199 198 158  12 111 119 181.
 20      120 148 184 212  72 111 116 114 104  78 232 217 218 207 208 203 210 204 209 194 179 166 152 156 171.
 21      162 178 170 177 175 171 166 164 167 161 183 165 179 183 185 161 168 237  37 126 123 120 164  97 163.
 22      274 228 279 111 156 219 336  75 152  14 144  61 181 219 208 161 225 355 323 316 220 229 215 149 209.
 23      123  97 125 166 140 192 142 144  95  89  30 195 179 168     206 200 198 177 197 134 143  89  83 147.
 24      127 141  85  57 148 189 171 123 166  27  34 359                                                 112.
 25                                                                  298 293 287 294 256 243 247  58  49 288.
 26      279 266  47 208  19 141 158  65 168 333 183 202 197 198 199 231 223 252 325 242 211 224 147  44 210.
 27      187 226 102 154 324  31 115 147 241  23 305 298 305 293 325 330 297 290 280 234 199             279.
 28                                                                              124 151 124 138 153 144 139.
 29      158 138 143 142 113 129 125 211 287  46 326 273 246 235 270 213 147  79  95 159 109  98 136 141 151.
 30      131 132 134 137 187 171 147 160 144 141 138 195 201 199 201 203 198 186 181 190 186 191 185 190 172.
 31      176 193 192 187 181 186 186 182 182 203 200 200 202 203 206 205 206 211 218 219 210 190 194 210 197.

 MEAN    136.155.270.270.127.183.171.148.144. 49.328.285.257.249.279.278.275.278.278.193.169.170.149.122.

                           TOTAL NUMBER OF OBSERVATIONS =  7429    MEAN  =  188.

                 * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                       DIURNAL VARIATION OF WIND DIRECTION AT 200 FEET
                        TRAILER NO. = 23  PERIOD(10/ 1/74 TO 10/31/74)

                                           HOUR
          1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1     241 197 108 124     217  72 173  19 302 330 352 331 333 309 299 316 311         147 131 201 190 275,
  2     201 165 121 159 205 160 210 153 159 165 219 220 219 224 203         219 201 189 183 184 184 171 187,
  3     195 199 183 190 175 159 194                                                                     185,
  4                                                 257         204 202 193 203 285 344 220 115 103 209,
  5     116 305 294 233 193 227 257 250 269 299 304 280 291 258 330 352 349  27  53  68  67   9 270 202 294,
  6                                                         292 306 312 294 286 324 307 224 236 209 281,
  7      37  95 135 263 192   7  75 264  97   8 357 322 320 312 300 305 332 288 334   2 268 245 160 107 329,
  8     148 193 343 342 290 263 288 123 117  78  44 322  11  69   5 339 270 316 333 343 215 235 162 138 328,
  9      83 158 126 157 163 147 176 196 188 184 191 196 205 201 204 221 216 223 216 202 198 178 174 204 186,
 10     194 202 127 106 192 273 224 148 177 126 222   6                 210 284 276 141 118 153 289 278 195,
 11     301 110 254 273 321 219 304 234 232 260 340 318  63 131 351  38 302  66 154 121 109  93  41 357 333,
 12       8  27 225 258 251 265                             302 305 320   9 269 237 205 203 164 179 264 262,
 13     291 257 211 229 174  37  96 266 250  57 305 307 337 303 319 305 335 338   2  94 200 218 235 269 286,
 14     315 297 277 276 293 298 279 254 211 283 332 330 307 332 344 336 320 336 347  39 105 128 172 170 304,
 15     151 178 236 278   8 192  87 237   1  80  31   1 336 310 341   1 358 339  47 136 198 163 218 201 331,
 16     131 113  91 290 168 105 107 113 145 118  85     326 335 348       2 341 357   4 100  52 110  82  73,
 17     323   8 102 116  86 290 119 284 266 148 131 340     309 307 324 331 340   1  30  85 102 289 354 357,
 18      19  72 140 282 115 357 292 312 278 280 312 305 303 308 317 332 326 329 351  16  10 261 117 280 323,
 19      83 121 129 107 112 199 284 153 360  78 145 225 226 246 263 267 262 216 219 222 218  47 133 137 183,
 20     116 187 208 214 134 124 145 178 185 159 234 237 236 226 227 223 229 223 232 219 202 192 179 182 197,
 21     191 196 191 199 193 191 185 184 187 179 203 186 197 201 203 181 188 256  45 125 138 134 173 142 182,
 22     298 253 296 134 172 233 306 148 152  92 138 122 192 236 220 181 255  12 356 337 323 280 250 186 226,
 23     140 168 171 186 178 224 163 200 158 113  39 207     197         229 223 207 229 177 178 139 116 179,
 24     168 177 136 298 195 232 249 206 296  73  53  21                                                 201,
 25                                                             312 302 293 317 320 265 269  72  93 309,
 26     197 256  56 126  28 157 223 221 214 212 204 220 216 215 220 246 235 269 351 335 242 262 209  65 225,
 27     181 306  68 125 349 278  54  49 294 357 317 310 315 304 329 340 308 302 297 241 207             323,
 28                                                                         149 159 147 160 172 166 159,
 29     176 156 154 145 120 137 135 204 301 348 328 276 246 237 271 243 177  94 119 175 136 119 148 157 172,
 30     160 152 153 160 213 193 167 182 176 169 178 213 218 216 219 221 215 202 203 211 207 209 204 211 194,
 31     198 212 210 206 199 203 204 203 204 221 218 218 220 222 211 207 209 214 222 223 215 206 215 229 211,

MEAN    163.182.270.270,181.211,192.200.211,132.289.282.270.262,286.287.280.287.294.214.183.183.182.174,

                    TOTAL NUMBER OF OBSERVATIONS =  7402    MEAN  =  220.

               * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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TEMPERATURE CHANGE FROM 30' TO 100' (DEG F*10)
TRAILER NO, - 23 PERIOD(10/ 1/74 TO 10/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	5	5	27	19		25	25	-2	-15	-14	-14	-14	-16	-15	-13	-10	-4	0			9	13	23	15	2,
2	19	33	22	22	29	10	16	12	8	-10	-14	-14	-16	-15	-15			-14	-4	11	20	14	15	15	7,
3	13	15	20	21	19	29	19																		20,
4													-15			-18	-17	-15	-5	-7	-5	-8	-6	0	-10,
5	9	0	1	-3	-1	0	-11	-14	-12	-13	-14	-13	-13	-16	-15	-13	-14	-14	-6	-4	-1	-1	-2	-2	-8,
6															-15	-17	-14	-10	-3	-2	-1	1	-1	1	-6,
7	6	-6	8	6	7	17	4	9	-14	-17	-18	-19	-19	-20	-18	-18	-16	-11	-4	1	4	10	8	11	-3,
8	19	13	15	7	7	10	10	17	-1	-18	-18	-19	-19	-19	-15	-18	-15	-12	-2	1	-2	1	3	8	-2,
9	12	15	8	17	5	2	4	4	-12	-17	-22	-24	-25	-27	-22	-23	-22	-16	-5	22	30	16	0	0	-3,
10	-4	0	6	6	9	10	0	7	3	-16	-19	-16					-15	-15	-9	3	8	12	15	-3	-1,
11	-6	-2	3	0	-5	-2	-1	-2	-6	-18	-20	-17	-20	-19	-11	-10	-13	-12	-11	-8	-3	-3	-7	-1	-9,
12	-5	-4	-6	0	-9	-9								-15	-16	-16	-14	-13	-11	-5	0	0	8	2	-7,
13	1	-5	0	2	2	5	-3	0	5	-14	-17	-18	-19	-20	-20	-19	-16	-11	-3	1	15	9	4	0	-5,
14	0	-1	-2	-1	-3	2	11	12	2	-3	-6	-24	-16	-21	-21	-20	-17	-11	-3	-1	-1	17	11	12	-4,
15	17	17	20	10	8	8	13	7	5	-14	-18	-18	-15	-19	-21	-39	-15	-7	0	13	22	9	14	20	1,
16	25	18	4	10	11	12	16	9	3	-14	-16	-15	-9	-12	-20	-9	-15	-21	0	5	3	7	14	10	1,
17	-4	9	9	18	15	13	4	4	1	-12	-12	-11		-8	-9	-8	-5	1	11	12	12	22	43	19	6,
18	13	13	9	16	19	16	0	12	4	-8	-16	-17	-18	-21	-19	-18	-18	-15	1	5	4	7	11	25	1,
19	6	6	8	24	12	12	13	19	13	-6	-14	-16	-17	-17	-16	-15	-14	-12	2	24	26	10	21	28	4,
20	16	17	27	21	12	22	27	29	24	-4	-14	-17	-19	-20	-21	-20	-18	-14	-1	15	16	15	10	6	5,
21	11	5	-1	1	-1	-6	-5	-6	-11	-16	-17	-18	-13	-3	-6	-4	0	0	4	5	6	9	11	12	-1,
22	3	3	3	18	15	15	19	21	33	22	15	3	0	0	-1	0	1	6	7	13	11	14	15	5	11,
23	8	4	10	20	15	15	11	19	22	7	0	-2	-4	-2		-27	0	1	1	-2	-1	2	2	9	5,
24	10	8	8	6	2	5	4	6	11	2	0	-5													5,
25																-9	-7	-5	1	8	12	8	13	11	4,
26	13	16	22	22	25	26	19	17	19	8	-2	-8	-8	-10	-10	-6	-5	-3	1	5	12	12	13	13	8,
27	18	13	14	20	3	9	15	17	14	-5	-8	-9	-11	-8	-12	-8	-5	-4	-2	-2	-2				2,
28																			1	10	8	7	0	0	5,
29	-1	0	6	11	10	6	7	8	1	0	-3	-3	-3	-3	-3	-3	0	0	2	4	6	8	12	11	3,
30	8	7	15	18	28	19	16	16	11	10	8	3	0	0	0	0	1	2	6	9	8	10	8	7	9,
31	7	5	5	5	5	5	4	4	4	4	3	2	1	1	1	2	3	3	4	4	5	4	5	5	4,
MEAN	8,	8,	10,	12,	9,	11,	9,	9,	5,	-7,	-11,	-13,	-13,	-13,	-14,	-13,	-11,	-8,	-1,	5,	8,	8,	10,	9,	

TOTAL NUMBER OF OBSERVATIONS = 7451 MEAN = 1,

```
                    TEMPERATURE CHANGE FROM 30' TO 200' (DEG F*10)
                     TRAILER NO. - 23  PERIOD(10/ 1/74 TO 10/31/74)

                                                HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  MEA
DAY

  1    -15 -22 -17 -20       7  23  31  29  28  34  25  20  19  15  .3   3 -16         -24 -22   8 -12    6
  2    -11 -17 -23  -2  -2 -14   4 -20  39  23   9   9   3   2   8          -9  -2   8  14  14   3 -14    1
  3      9  10  11  11  -5   8   8                                                                        8
  4                                                 -5          -9 -13 -15  -6  -2  -6 -18 -20 -10  -11
  5     -4  -5 -15 -12  -3   0  -5 -12  -7  -6  -8  -7  -2  -6  -4   0  11  10 -10 -38 -39 -38 -38 -38  -12
  6                                                         13   3  -3 -15 -20 -19 -20 -17 -13 -18  -11
  7    -24 -21 -15 -14 -13 -15 -17  17  17  23  33  30  25  23  15  20  21   1  -7 -15 -20 -21 -17 -24   -2
  8      0   3  -8 -12 -20 -23 -24 -23  12  19  14  20  21  17  30  20  -4   3  -9 -18 -18 -12 -14 -19   -2
  9    -20   7 -10   2 -16  -8  -2  14   2 -11 -10 -10 -13 -10 -14  -8 -11 -10  -6  17  26  10   4   0   -3
 10    -20 -11 -11 -11 -21   4  -5 -12  12   3  -3  -1                 -14 -12 -20 -21  -8  -7  21  -2   -7
 11    -16 -18   5   8 -16 -23 -11  -8  -8  -4  16   3   2  -3  -6  -9 -19 -17 -22 -18 -17 -11 -10 -12   -9
 12    -19 -22 -21  -4  -9  -8                             8  14  10   7  -3 -13  -9  -1  -1   0 -17   -6
 13    -19 -21 -24 -17 -21 -24 -22 -10  27  30  27  19  16  13  16  18  15   7 -11 -21 -10 -19  -4 -17   -2
 14    -24 -12  -2  -5  -6  -5  15  11  19  36  44   9  23  13  11  11  11   2 -16 -22 -21  -2   7  -3    4
 15     -6 -20 -12  -7 -23 -24 -11  -4  32  18  17  23  28  25  18      12   4 -15  -7  13 -20 -14 -18    2
 16    -15   6  -3 -18 -17 -18  -4  -1  19  19  17  19  32  29  17 -17  27  -5   2  12   6  17  34  34    8
 17     24  28  33  33  50  29  15  18  13 -12 -13 -11      29  25  26  28  18  -1  -8 -23 -19   0  -1   13
 18    -33 -27 -24  -5 -25 -26  -6 -23   5  18  18   5  -3  -2   0  -3  -6 -13 -21 -25 -38 -37 -39 -30  -15
 19    -24  -7  -5   2   0 -11 -16 -15  -4  21   8   5   0   3   7   6   0  -4   8  38  42  -7 -20  -6    1
 20    -10 -13  16  23 -18 -11   8  17  44  26  11   2  -1  -9  -9  -9 -11  -8   0  20   8   8  10   7    4
 21     11   0 -10  -4  -4                                                                            -1
 22
 23
 24
 25                                                             21   9  10   9  12   8   0 -14  -8    5
 26     10  10   4   0  14   3   9  11  22  46  19  11  10  13  21  12  14   6   6   3  -5   0  11  -9   10
 27     -3  12   4  14   6   4  -8 -20  29  41  29  29  20   5  13   9   1   1   3   2   3                9
 28                                                                         -5   7  10   6   0   0    4
 29      0   0   6  16  13   9   9  18  13  10   1   3  -1  -7  -1   0   5   4   0   0   1  -4   8  10    5
 30      1  -8   6  14  16  12  14  15  12  23  17  21  17  11  10   7  10   7   6   7   6  11   8   8   11
 31      9   6   7   7   6   6   6   5   4   5   6   6   7   6   5   5   4   4   4   3   4   6   5   2    5

MEAN    -8. -5. -5.  0. -5. -6. -1.  0. 16. 17. 14. 10. 10.  9. 10.  5.  5. -2. -6. -4. -4. -7. -3. -8.

                     TOTAL NUMBER OF OBSERVATIONS =  6521    MEAN  =    1.
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APPENDIX A

STABILITY WIND ROSE DIAGRAMS

APPENDIX A

STABILITY WIND ROSE DIAGRAMS

According to the data presented in AEC Safety Guide No. 23, the relationships between stability classes and σ_Θ are as follows (the values shown are averages for each stability classification...σ_Θ is the standard deviation of horizontal wind direction fluctuations).

Stability Classification	Pasquill Categories	Average Values σ_Θ (degrees)
Extremely Unstable	A	25.0°
Moderately Unstable	B	20.0°
Slightly Unstable	C	15.0°
Neutral	D	10.0°
Slightly Stable	E	5.0°
Moderately Stable	F	2.5°

Stability wind roses obtained at the trailers in the monitoring network are displayed in the following tables. Because of the relatively low heights above the surface (9 meters) at which the wind data is taken, the stability distributions are skewed toward the unstable end of the spectrum. That is, the unstable classes (A, B, and C) have a much higher frequency of occurrence than would be obtained with the Pasquill method of stability categorization (or with instruments at higher levels).

Table 1 depicts the frequency distribution of Pasquill stability categories based on σ_Θ from data collected by M. M. Pendergast and T. V. Crawford at the Savannah River Plant ("Actual Standard Deviations of Vertical and Horizontal Wind Direction Compared to Estimates from Other Measurements", Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974). Three distinct range patterns of stability class distributions were observed: low, mid, and high, according to the height at which the σ_Θ measurements were taken.

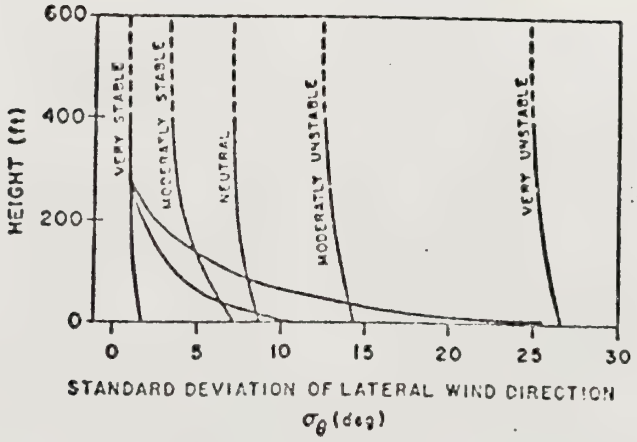
TABLE 1

Frequency distribution of Pasquill Stability Categories

	Stability Categories based on σ_θ							
Height, m	A $\sigma_\theta > 23$	B $18 \leq \sigma_\theta < 23$	C $13 \leq \sigma_\theta < 18$	D $8 \leq \sigma_\theta < 13$	E $4 \leq \sigma_\theta < 8$	F $2 \leq \sigma_\theta < 4$	G $\sigma_\theta < 2$	
10	22.6	13.9	21.8	28.9	8.9	0.4	3.5	LOW RANGE
36	19.3	11.8	19.4	32.4	15.9	0.7	0.5	
91	9.6	6.7	13.5	21.7	29.6	16.4	2.5	MID RANGE
137	9.3	5.8	11.7	20.8	28.5	18.4	5.5	
182	7.0	2.9	6.8	17.1	25.9	25.6	14.7	HIGH RANGE
243	7.7	4.3	9.4	17.7	27.6	22.9	10.4	
304	7.2	3.7	8.0	17.2	28.7	23.9	11.3	

Also, Figure 1 (from D. H. Slade, Meteorology and Atomic Energy, 1968, p. 52) demonstrates that the line representing very stable conditions (which by their nature are associated with light winds) branches into three separate lines near the ground. The curve at the left represents the smallest values of σ_Θ usually observed. The curve that branches off to the right reflects the contribution of very low-level wind direction meander to the total standard deviation. These meandering oscillations decrease in amplitude very rapidly with height under stable conditions. The central curve represents typical inversion conditions. Actually, for a given stability condition, values of σ_Θ will always be greater when the wind is light than when it is strong. This phenomena is most noticeable in the lowest layers.

Figure 1



· The vertical variation of the lateral wind-direction standard deviation (σ_θ) for various stability regimes. The curves represent average or typical conditions with the exception of the two outer "very stable" lines, which represent extremes.

The large surface values of σ_Θ for unstable conditions do not decrease very rapidly with height. As in the case of very stable conditions, the greatest lateral fluctuations during a very unstable thermal structure occur with very light winds. As a general rule, for a given insolation condition, increasing wind speeds are associated with profiles of σ_Θ that tend toward neutral stability.

The majority of the trailers in the network recorded very light winds throughout the month. Therefore, the stability distributions had a predominance of high σ_Θ values and, hence, unstable classifications. Those trailers with the highest average winds (and fewest nearby obstacles to the flow) generally had the more reasonable and representative low-level stability class distributions.

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                                   STABILITY WIND ROSE DIAGRAM

                                 ATLANTIC RICHFIELD COMPANY
                           TRAILER NO. -  20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      A

                                                        WIND DIRECTION
                   N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

  GT   24    :                                                                               :
 18 -  24    :                                                                               :
 12 -  18    :                     3    3    1    1         4    4         1                 :    17
  7 -  12    :             2   14    5   24   31   47   27   27   17   19   14    4    1    1 :   233
  3 -   7    :  15    2    7   51  173  116   41   62   89   86   53   67   66   68   47   20 :   963
  LT    3    :  65   44   34  446  798  246   50   79  108  104  108  132  169  112  116   65 :  2676
   TOTAL     :  80   46   43  514  979  387  123  188  228  221  178  219  249  184  164   86 :  3889
              ...........................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      1527(  39.26 % )
```

```
                                  STABILITY WIND ROSE DIAGRAM

                              ATLANTIC RICHFIELD COMPANY
                         TRAILER NO, -  20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -       B

                                                                WIND DIRECTION
                N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH

   GT   24   :                                                                                  :
 18 -   24   :                                                                                  :
 12 -   18   :                   1    2    4    2              1                                 :    10
  7 -   12   :                   4    2   23   19   12    4    2    4   13   12    5         1 :   101
  3 -    7   :  7    2          31  126   71   10   11    9    8   23  111   68   23    9   11 :   520
   LT    3   :  7    9   21    225  333  104    7    4    6    9   22   93  107   37   16   18 :  1018
   TOTAL     : 14   11   21    261  463  202   38   27   19   20   49  217  187   65   25   30 :  1649
             .........................................................................................

                    TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       455(  27,59 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                  TRAILER NO. = 20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -       C

                                                        WIND DIRECTION
                      N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW  TOTAL
 WIND SPEED
   MPH


   GT   24    :                                                                                                  :
 18 -   24    :                                                                                                  :
 12 -   18    :                             1     4                                                 1     1     2 :     9
  7 -   12    :                       3     4    48     4     1     1           2    23    13     4     0     0 :   103
  3 -    7    :       9     3     5    70   167   139     5     4     2          11   102    63    26     4     3 :   613
   LT    3    :      15     5    29   377   381   132     3     2     0          10    76    80    33     8     5 :  1156
   TOTAL      :      24     8    34   450   553   323    12     7     3     0    23   201   156    64    13    10 :  1881
                  ..........................................................................................................

                            TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       454(  24.14 % )
```

```
                                          STABILITY WIND ROSE DIAGRAM

                                       ATLANTIC RICHFIELD COMPANY
                                  TRAILER NO. - 20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -       D

                                                                    WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


    GT   24    :                                                                              :
   18 -  24    :                                                                              :
   12 -  18    :                                                                              :
    7 -  12    :                     1    4   21                                  6    3      :     35
    3 -   7    :    4    2    3   34   95   95                                 13   15    5         1 :    267
    LT    3    :   12    2   15  280  204   96         1              1   12   15   13    1    3 :    655
     TOTAL     :   16    4   18  315  303  212    0    1    0    0    1   31   33   18    1    4 :    957
               ..........................................................................................

                            TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        269(  28.11 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. =  20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      E

                                                     WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH

    GT   24    :                                                                               :
  18 -   24    :                                                                               :
  12 -   18    :                                                                               :
   7 -   12    :                          8                                   1                :    9
   3 -    7    :    2               3    14   18                              0    1           :   38
    LT    3    :    1          1   50    33   15                              0    0    3      :  103
     TOTAL     :    3    0     1   53    47   41    0    0    0    0     0    1    1    3    0    0 :  150
                 ...................................................................................

                          TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       52(  34.67 % )
```

```
                              STABILITY WIND ROSE DIAGRAM

                             ATLANTIC RICHFIELD COMPANY
                        TRAILER NO. = 20    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =  TOTAL

                                                    WIND DIRECTION
              N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

  GT  24  :                                                                                 :
 18 - 24  :                                                                                 :
 12 - 18  :                     4    6    9    3         4    5         1         1    1    2 :   36
  7 - 12  :                2   22   15  124   54   60   32   29   23   62   42   13    1    2 :  481
  3 -  7  :   37    9   15  189  575  439   56   77  100   94   87  293  213  122   60   35 : 2401
  LT   3  :   98   57  105 1424 1768  617   52   73   94   93  130  332  382  193  127   86 : 5631
   TOTAL  :  135   66  122 1639 2364 1189  165  210  230  221  240  688  637  329  189  125 : 8549
          ........................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      2757(  32.25 % )


                     PERCENTAGE OF      A STABILITY =  45.49 %
                     PERCENTAGE OF      B STABILITY =  19.29 %
                     PERCENTAGE OF      C STABILITY =  22.00 %
                     PERCENTAGE OF      D STABILITY =  11.19 %
                     PERCENTAGE OF      E STABILITY =   1.75 %
```

CORPORATION

```
                                     STABILITY WIND ROSE DIAGRAM

                                   ATLANTIC RICHFIELD COMPANY
                             TRAILER NO. =  21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -       A

                                                         WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


   GT   24   :                                                                                 :

 18 -   24   :                                       1                                    1    :     2

 12 -   18   :                                  16   7                               2    3    2 :    30

  7 -   12   :     1    1    2    1   17   27   75   73   14    6   14   16   13   26   42   11 :   339

  3 -    7   :    16    6    7   24  195  260  197  124   53   31   19   20   35   91  117   36 :  1231

   LT    3   :    68   39   28   58  201  350  227  144   79   47   39   45   61  122  125   72 :  1705

   TOTAL     :    85   46   37   83  413  637  515  349  146   84   72   81  109  241  288  121 :  3307
                ...................................................................................

                        TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       727(  21.98 % )
```

```
                                  STABILITY WIND ROSE DIAGRAM

                                    ATLANTIC RICHFIELD COMPANY
                             TRAILER NO, =  21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      B

                                                   WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


   GT   24    :                                                                                 :
  18 -  24    :                                1    6    1                                1     :     9
  12 -  18    :                                6   32    8                      1    1    3     :    51
   7 -  12    :        1                 1   15   17   48   14    2    4    7    5    5   26   47    2 :   194
   3 -   7    :        1         1   15   97  166   94   37    8   13    7   12   24   59   58    8 :   600
   LT    3    :       12    7    5   20   69  135  109   46   10   11    8    3   12   32   51   21 :   551
    TOTAL     :       14    7    6   36  181  325  289  106   20   28   22   20   42  118  160   31 :  1405
              ..........................................................................................

                   TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       214(  15.23 % )
```

```
                              STABILITY WIND ROSE DIAGRAM

                               ATLANTIC RICHFIELD COMPANY
                         TRAILER NO, =  21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      C

                                                    WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
  WIND SPEED
     MPH

   GT   24   :                                                                                  :
   18 - 24   :                               1    2                                             :      3
   12 - 18   :                     1    1   16   28    1                                  1     :     48
    7 - 12   :                     3   15   54   31    0    1    1    1    1   11   34   31    3 :    186
    3 -  7   :    1    3    7   17  139  190   84   25    2   12    3    6   36   42   54   15 :    636
   LT    3   :   16    7    6   16   95  165   83   29    6    3    2    2   17   32   56   24 :    559
    TOTAL    :   17   10   13   37  250  426  228   55    9   16    6    9   64  108  142   42 :   1432
               .........................................................................................

                    TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      192(  13,41 % )
```

```
                                       STABILITY WIND ROSE DIAGRAM

                                      ATLANTIC RICHFIELD COMPANY
                                TRAILER NO. -  21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =       D

                                                      WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


  GT   24    :                                                                                 :

 18 -  24    :                             1                                                   :     1

 12 -  18    :                        2    8    3                                     3        :    16

  7 -  12    :                   9   11   30    7    1                       1   14   49    2  :   124

  3 -   7    :    2         2   21   84   86   25    6         1         1   9   19   67   12  :   335

  LT    3    :   16    3    1   28   78   78   24    8         2         0   3   10   38   26  :   315

   TOTAL     :   18    3    3   58  175  203   59   15    0    3    0    1  13   43  157   40  :   791
                 ....................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       129(  16.31 % )
```

```
                                   STABILITY WIND ROSE DIAGRAM

                                     ATLANTIC RICHFIELD COMPANY
                               TRAILER NO. -  21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -       E

                                                         WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


    GT   24    :                                                                              :

  18 -   24    :                                                                              :

  12 -   18    :                       1    2                                                 :     3

   7 -   12    :                  3    3    1                                    1    2       :    10

   3 -    7    :   1              3   11   14                                    2    2       :    33

    LT    3    :   7    1        14   15   19    1    2                          0    2   17  :    78

    TOTAL      :   8    1    0   20   30   36    1    2    0    0    0    0    0    3    6   17  :   124
                ........................................................................................

                        TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        38(  30.65 % )
```

```
                              STABILITY WIND ROSE DIAGRAM

                                ATLANTIC RICHFIELD COMPANY
                          TRAILER NO. = 21    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =  TOTAL

                                                           WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24    :                                                                                :
  18 -  24    :                          3    8    2                                   2       :   15
  12 -  18    :                    1    4   32   79   16                        1    3   10    2 :  148
   7 -  12    :    2    1    2   17   61  129  161   88   17   11   22   22   30  101  171   18 :  853
   3 -   7    :   21    9   17   80  526  716  400  192   63   57   29   39  104  213  298   71 : 2835
   LT    3    :  120   58   41  137  467  759  449  227   92   63   49   50   96  200  278  160 : 3246
    TOTAL     :  143   68   60  235 1058 1639 1097  525  172  131  100  111  231  517  759  251 : 7097
                ..........................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      1300(  18.32 % )


                   PERCENTAGE OF      A STABILITY =  46.60 %
                   PERCENTAGE OF      B STABILITY =  19.80 %
                   PERCENTAGE OF      C STABILITY =  20.18 %
                   PERCENTAGE OF      D STABILITY =  11.15 %
                   PERCENTAGE OF      E STABILITY =   1.75 %
```

CORPORATION

```
                                        STABILITY WIND ROSE DIAGRAM

                                       ATLANTIC RICHFIELD COMPANY
                             TRAILER NO. =  22    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      A

                                                           WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


    GT   24    :                                                                                :

  18 -   24    :                                                                                :

  12 -   18    :                          8    2                                3    1          :    14

   7 -   12    :      5         1   37  240   40   11    4    3    4   18   44   44    3       1 :   455

   3 -    7    :     17   11   50  147  257   54   28   12   16   22   46   68   55   23   13  10 :   829

    LT    3    :     17   29   68  104   80   28   24   12   10    9   15   22   18   13   10  10 :   469

     TOTAL     :     39   40  119  288  585  124   63   28   29   35   79  137  118   39   23  21 :  1767
                 ......................................................................................

                            TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        131(   7.41 % )
```

```
                                            STABILITY WIND ROSE DIAGRAM

                                          ATLANTIC RICHFIELD COMPANY
                                   TRAILER NO. =  22    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      B

                                                                    WIND DIRECTION
                         N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


     GT   24   :                                                                                  :

   18 =   24   :                                                                                  :

   12 =   18   :                         4                                        2    1          :     7

    7 =   12   :         1         3   31  109    5    3              1    5   31   15    2        :   206

    3 =    7   :         3    7   16   60  118   14    1    1    1    1    7   27   27    7       6 :   296

     LT    3   :         1    4   24   41   40    6    3    1    0    1    4    9   10    3       5 :   152

      TOTAL    :         5   11   43  132  271   25    7    2    1    3   16   69   53   12    0  11 :   661
                    ..................................................................................................

                             TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       57(   8,62 % )
```

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(10/ 1/74 TO 10/31/74)

STABILITY CLASS - C

WIND SPEED MPH		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 24	:																	:	
18 - 24	:																	:	
12 - 18	:				11	13							4					:	28
7 - 12	:			1	37	108	1					1	19	14				:	181
3 - 7	:	5	3	8	47	71	4	4				4	27	34	5			:	212
LT 3	:	3	6	21	43	32	6	0			1	1	13	13	4		1	:	144
TOTAL	:	8	9	30	138	224	11	4	0	0	1	6	63	61	9	0	1	:	565

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 57(10.09 %)

```
                                        STABILITY WIND ROSE DIAGRAM

                                     ATLANTIC RICHFIELD COMPANY
                               TRAILER NO, =  22    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      D

                                                       WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


    GT   24     :                                                                                 :
  18 -   24     :                                                                                 :
  12 -   18     :                  25   14                                  1                     :   40
   7 -   12     :    2         1   48   84                                  7    5                :  147
   3 -    7     :    6    2    4   16   30                                 14    4              1 :   77
    LT    3     :    3    7    8   21   11    5         1         1    1   10    6              0 :   74
     TOTAL      :   11    9   13  110  139    5    0    1    0    1    1   32   15    0    0    1 :  338
                  .........................................................................................

                          TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        39( 11,54 X )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                      ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. = 22    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      E

                                                       WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


    GT   24     :                                                                               :

  18 -   24     :                                                                               :

  12 -   18     :                  11     6                                                     :    17

   7 -   12     :                   8    23                                     2               :    33

   3 -    7     :                   3     4    1                                2    1        2 :    13

    LT    3     :                   6     8    0    1                           3    0        1 :    19

     TOTAL      :     0    0    0  28    41    1    1    0    0    0    0    7    1    0    0  3 :    82
                ...................................................................................

                             TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        17(  20.73 % )
```

```
                                STABILITY WIND ROSE DIAGRAM

                             ATLANTIC RICHFIELD COMPANY
                       TRAILER NO. = 22    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =  TOTAL

                                                        WIND DIRECTION
                 N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
 WIND SPEED
   MPH


  GT   24   :                                                                                 :

 18 -  24   :                                                                                 :

 12 -  18   :                   47   45    2                               10    2            :   106

  7 -  12   :    8         6  161  564   46   14    4    3    5   24  103   78    5          1 :  1022

  3 -   7   :   31   23   78  273  480   73   33   13   17   23   57  138  121   35   13   19 :  1427

  LT    3   :   25   47  124  214  172   48   31   15   11   13   24   55   49   22   11   17 :   878

   TOTAL    :   64   70  208  695 1261  169   78   32   31   41  105  306  250   62   24   37 :  3433
                ...................................................................................

                   TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =       301(   8.77 % )


                            PERCENTAGE OF      A STABILITY =  51.47 %
                            PERCENTAGE OF      B STABILITY =  19.25 %
                            PERCENTAGE OF      C STABILITY =  16.46 %
                            PERCENTAGE OF      D STABILITY =   9.85 %
                            PERCENTAGE OF      E STABILITY =   2.39 %
```

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

STABILITY CLASS = A

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24									1								1
12 - 18								6	10	29	8		1				54
7 - 12					1			19	22	14	10	5	1	1	2		75
3 - 7	2	2	4	6	10	13	6	10	38	45	15	2	12	15	21	10	211
LT 3	17	26	29	58	54	71	84	65	161	236	75	26	58	80	66	40	1146
TOTAL	19	28	33	64	65	84	90	100	232	324	108	33	72	96	89	50	1487

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 880(59.18 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. = 23 PERIOD(10/ 1/74 TO 10/31/74)

STABILITY CLASS = B

WIND DIRECTION

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24									1								1
12 - 18						1		14	14	11							40
7 - 12					1	2	8	4	28	22	1	1			3	1	71
3 - 7	3		2	2	4	4	9	13	22	50	31	12	4	4	10	8	178
LT 3	10	6	4	11	18	34	58	45	88	233	97	39	25	29	39	23	759
TOTAL	13	6	6	13	23	41	75	76	153	316	129	52	29	33	52	32	1049

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 525(50.05 %)

CORPORATION

```
                                       STABILITY WIND ROSE DIAGRAM

                                        ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. =  23    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      C

                                                          WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


   GT   24    :                                                                                 :
 18 -   24    :                                             2    1                   1          :     4
 12 -   18    :                              1         4    0    5                   0          :    10
  7 -   12    :               1              6    4   13   11    2    1              1    5    1 :    45
  3 -    7    :     2    5   17   11    6   16   15   14    8   55   27   14    5   15    8    9 :   227
   LT    3    :     5    7   20   12   24   35   36   23   57  203   97   30   25   25   20   15 :   634
    TOTAL     :     7   12   38   23   30   58   55   54   78  266  125   44   30   42   33   25 :   920
                ..........................................................................................

                        TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      381(  41.41 % )
```

```
                                              STABILITY WIND ROSE DIAGRAM

                                              ATLANTIC RICHFIELD COMPANY
                                       TRAILER NO. = 23    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      D

                                                                WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH


   GT   24    :                                                                                   :
 18 -   24    :                                                                     1             :     1
 12 -   18    :                              2                                      3    1        :     6
  7 -   12    :        2                     3    3    6    1         1                1    1    3 :    21
  3 -    7    :        3    6   13    9    8   13    5    1    2   19    8    1         7   19    6 :   120
   LT    3    :       12    5   17   11   10   27   11    5    8   51   18    9    6    8   29   15 :   242
    TOTAL     :       17   11   30   20   18   45   19   12   11   70   27   10    6   16   53   25 :   390
              ..........................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      147(  37.69 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                          ATLANTIC RICHFIELD COMPANY
                                   TRAILER NO. -  23    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -      E

                                                           WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24     :                                                 1                                :     1
 18 -   24     :                                            7    7    1                           :    15
 12 -   18     :                                           17   38    4    1                      :    60
  7 -   12     :                                            9   27   28   12   13    7    1       :    97
  3 -    7     :                7    9    2   10   13   10   18   47   11    2    2    1    5    4 :   141
   LT    3     :      4    1    4    9    2   11    9   14   11   23    6    1    1    1    2    5 :   104
    TOTAL      :      4    1   11   18    4   21   22   57  102  103   30   16   10    3    7    9 :   418
                 ..........................................................................................

                            TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        36(   8.61 % )
```

```
                                      STABILITY WIND ROSE DIAGRAM

                                       ATLANTIC RICHFIELD COMPANY
                               TRAILER NO. =  23    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =  TOTAL

                                                              WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH


   GT   24   :                                              1                                   :    1

 18 -   24   :                                         7   11    2                   1    1      :   22

 12 -   18   :                               4        41   62   49    9         1    0    3    1 :  170

  7 -   12   :  2         1         2   11   15   51   89   66   25   19    8    4   11    5 :  309

  3 -    7   : 10   13   43   37   30   56   48   48   88  216   92   31   23   42   63   37 :  877

   LT    3   : 52   45   89  108  105  189  201  157  302  766  302  108  105  130  153  102 : 2914

    TOTAL    : 64   58  133  145  137  260  264  304  553 1099  428  158  137  177  231  145 : 4293
            ..............................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =      1969(  45.87 % )


                           PERCENTAGE OF      A STABILITY =  34.64 %
                           PERCENTAGE OF      B STABILITY =  24.44 %
                           PERCENTAGE OF      C STABILITY =  21.43 %
                           PERCENTAGE OF      D STABILITY =   9.08 %
                           PERCENTAGE OF      E STABILITY =   9.74 %
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                    TRAILER NO. = 24     PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =       A

                                                                 WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


   GT   24    :                                                                                     :

  18 =  24    :                                                                                     :

  12 =  18    :                                                                                     :

   7 =  12    :                                                                                     :

   3 =   7    :                                                                                     :

   LT    3    :                                                                                     :

    TOTAL     :        0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :   0
                    ..................................................................................

                             TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        0(   0.00 % )
```

```
                                     STABILITY WIND ROSE DIAGRAM

                                   ATLANTIC RICHFIELD COMPANY
                              TRAILER NO. = 24    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =       B

                                                      WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24    :                                                                                :

 18 -   24    :                                                                                :

 12 -   18    :                                                                                :

  7 -   12    :                                                                                :

  3 -    7    :                                                                                :

   LT    3    :                                                                                :

    TOTAL     :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :     0
                   ..................................................................................

                         TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        0(   0.00 % )
```

```
                                          STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. -  24    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS -      C

                                                        WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH

   GT   24    :                                                                                   :
 18 -   24    :                                                                                   :
 12 -   18    :                                                                                   :
  7 -   12    :                                                                                   :
  3 -    7    :                                                                                   :
   LT    3    :                                                                                   :
   TOTAL      :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
              ...........................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          0(   0.00 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                        ATLANTIC RICHFIELD COMPANY
                                  TRAILER NO. =  24    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =       D

                                                         WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH

    GT   24     :                                                                                   :

   18 =  24     :                                                                                   :

   12 =  18     :                                                                                   :

    7 =  12     :                                                                                   :

    3 =   7     :                                                                                   :

    LT    3     :                                                                                   :

     TOTAL      :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                  .....................................................................................

                              TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =          0(   0.00 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                      ATLANTIC RICHFIELD COMPANY
                               TRAILER NO, = 24    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =      E

                                                                 WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24    :                                                                                :
 18 =   24    :                                                                                :
 12 =   18    :                                                                                :
  7 =   12    :                                                                                :
  3 =    7    :                                                                                :
   LT    3    :                                                                                :
    TOTAL     :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                ..........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        0(   0,00 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                  TRAILER NO. =  24    PERIOD(10/ 1/74 TO 10/31/74)
STABILITY CLASS =  TOTAL

                                                          WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


   GT   24    :                                                                                   :

 18 =   24    :                                                                                   :

 12 =   18    :                                                                                   :

  7 =   12    :                                                                                   :

  3 =    7    :                                                                                   :

   LT    3    :                                                                                   :

    TOTAL     :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                .......................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE =        0(   0.00 % )


                              PERCENTAGE OF      A STABILITY =   0.00 %
                              PERCENTAGE OF      B STABILITY =   0.00 %
                              PERCENTAGE OF      C STABILITY =   0.00 %
                              PERCENTAGE OF      D STABILITY =   0.00 %
                              PERCENTAGE OF      E STABILITY =   0.00 %
```

Radian AQ Data (Ref 3)

RADIAN
CORPORATION

RC#100-056

AIR MONITORING REPORT
FOR
C-b SHALE OIL PROJECT
NOVEMBER 1974

Report No. 3

23 January 1975

Presented to:
C-b Shale Oil Project
Suite 555, Two Park Central
1515 Arapahoe Street
Denver, Colorado 80202

Attn: Mr. Max Legatski

Prepared by:
Radian Staff

II C-230

8500 Shoal Creek Blvd./P.O. Box 9948/Austin, Texas 78766/(512)454-4797

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I. GENERAL DESCRIPTION OF AIR MONITORING PROGRAM

Radian Corporation is under contract to C-b Shale Oil Projects to provide ambient air quality monitoring. Each site measures and records the concentration of particulates, sulfur dioxide, and hydrogen sulfide. In addition, two of the sites record the amounts of nitrogen oxides, total hydrocarbons, methane, ozone, and carbon monoxide. Selected meteorological parameters such as wind speed, wind direction, temperature, and rainfall are monitored at each station. A 200-foot meteorological tower at one of the sites provides meteorological information as a function of height.

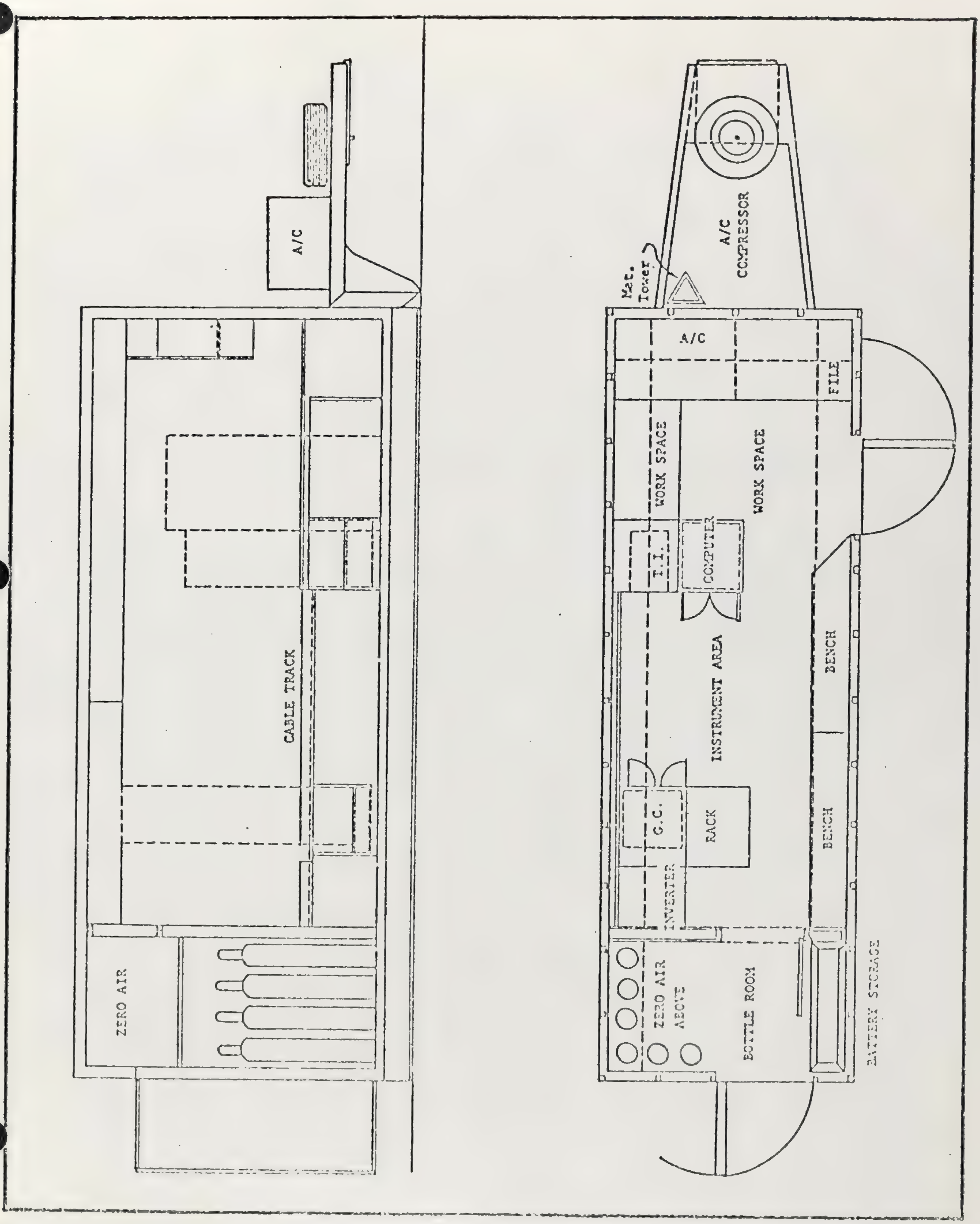
A/C
CABLE TRACK
ZERO AIR
Met. Tower
A/C COMPRESSOR
A/C
FILE
WORK SPACE
WORK SPACE
T.I.
COMPUTER
INSTRUMENT AREA
BENCH
BENCH
G.C.
RACK
INVERTER
ZERO AIR ABOVE
BOTTLE ROOM
BATTERY STORAGE

Figure 1

II. DESCRIPTION OF INSTRUMENT SYSTEMS

A. Air Quality Instrumentation

Nitrogen oxides are measured with a Meloy Model NA520 analyzer. This dual-channel analyzer is based on the chemiluminescent principle, and continuously monitors both NO_x and NO. A subtraction circuit in the instrument provides a continuous NO_2 output, but is not used in Radian's system. NO_2 is calculated once a second by the computer by subtracting the NO value from the NO_x value, thus avoiding any drift which might occur in the NO_2 output of the instrument. This instrument has a minimum detectable sensitivity of 5 ppb (parts per billion), and a linearity of 1%.

Both sulfur dioxide and hydrogen sulfide are measured with Meloy Model SA185 sulfur analyzers. The hydrogen sulfide analyzer uses a Meloy Model SO_x-1 sulfur dioxide scrubber and the sulfur dioxide analyzer uses a Meloy Model H_2S-1 hydrogen sulfide scrubber. The Model SA185 is a continuous analyzer, and utilizes the flame photometric principle of operation. The minimum detectable sensitivity is 5 ppb, and the linearity is ±1%.

Ozone is measured with a Meloy Model OA350 analyzer. This instrument provides continuous measurement of ozone, and is based on the chemiluminescent principle. The minimum detectable sensitivity is 0.5 ppb and the linearity is 1%.

Total hydrocarbons, methane, and carbon monoxide are monitored with a Bendix Model 8200 gas chromatograph analyzer. This instrument uses a plume ionization detector and has a minimum detectable sensitivity of 5 ppb for all three components. The Model 8200 works on a five-minute cycle, i.e., one air sample is analyzed every five minutes.

The air sample is drawn in through a glass cane and manifold supplied by the Ace Glass Company. The system has a 25mm diameter, and a constant air flow through the system is provided by an air pump rated at 60 cfm at 0" head pressure. The manifold has sampling ports to which ¼" teflon lines to the instruments are connected. All joints in the sampling system are secured by O-ring compression fittings. The manifold is contained in a heated (100°F) chamber to prevent condensation of moisture. The teflon lines from the manifold to the instruments are insulated with 1/8" wall thickness rubber tubing.

The trailer has four heavy duty high volume particulate samplers (Hi-Vols). Fiberglass filter paper is used for collection of particulate samples, and each filter is brought to a controlled humidity before weighing. Each Hi-Vol has a flow recorder to permit correction for changes in air flow as the filter becomes loaded with particulates. Each Hi-Vol runs for a 24-hour period (midnight to midnight), and is turned on and off by the computer. The Hi-Vols were designed following guidelines recommended by the Environmental Protection Agency and were manufactured by Radian.

B. Calibration Procedures

Each trailer contains a Meloy Model RAD-1 calibration unit. This instrument provides a zero air supply, SO_2 span gas from an SO_2 permeation tube, and NO span gas obtained by precisely diluting bottled NO span gas. The calibration of all instruments is automatically performed once a day, and is controlled by the computer. Each instrument is first switched to zero, and the computer monitors the output of each channel and takes a new zero reading after a stable zero signal has been reached. This zero reading is compared by the computer to the zero reading obtained 24 hours before, and if a drift in excess of 10ppb has occurred, an excess zero drift light for the channel in question is turned on on the System Status Panel. Next, span gas is supplied to each channel and the computer decides when a stable span value has been reached. This value is recorded and compared to the previous day's value. An excess span drift light on the System Status Panel is turned on if a drift exceeding 10ppb occurs. The instruments are then returned to the monitor mode, and after two minutes the computer resumes data taking.

The bottled NO gas used at each site was obtained from Precision Gas Products. Pre-purified grade hydrogen is used in the SO_2 analyzers.

The SO_2 permeation tubes were manufactured by Metronics Association, Inc. Their output has been verified by comparison to the output of National Bureau of Standards tube 10-42. Both SA185 analyzers in each trailer are calibrated with SO_2 from the permeation tube. This instrument responds to the number of sulfur atoms per molecule, thus SO_2 can be used to calibrate both the H_2S and SO_2 monitors

The Model OA350 ozone analyzer has its own calibration system which provides a zero check and a span check. The ozone calibration system is verified by comparison to a calibrated ozone generator maintained in Radian's laboratory in Rifle.

The Model 8200 total hydrocarbon, methane, and carbon monoxide analyzer is calibrated with undiluted span gas obtained from Airco's Rare and Specialty Gas Division. This span gas contains methane and carbon monoxide in air, the methane being used to calibrate both the total hydrocarbon channel and the methane channel. The Model 8200 is zeroed with air from a

Bendix Model 8834 zero air unit. In addition the instrument is electronically re-zeroed at the start of every five-minute cycle.

The Hi-Vol particulate samplers were calibrated using a Calibration Kit from General Metal Works.

C. Data Acquisition System

The basis of the data acquisition system is a Data General NOVA 1200 minicomputer. The NOVA which has a basic cycle time of 1.2 μsec is equipped with automatic program load and power fail/automatic restart features. The computer utilizes 16K 16-bit words of core memory. Analog-to-digital conversion is accomplished via an ADC built by Radian Corporation. The input/output unit for the system is Texas Instrument's KSR 733 keyboard/printer. This model teletype provides keyboard entry and hard copy printed output. The data are also recorded on a cassette magnetic tape unit with three drives. The cassette unit is utilized for program storage and loading as well as recording. The power to the teletype and cassette units is turned on only when the unit(s) is to be used to reduce wear on mechanical parts. Several important functions in the instruments as well as in the computer and the trailer are monitored by means of lights on a System Status Panel. These data lights are written onto cassette tape to monitor the complete status of the system every five minutes. The Data Acquisition System also monitors the presence of 110V power from the power lines. In its absence, the computer, which is powered by batteries, switches all trailer systems to battery-provided power. If the line voltage is restored before the batteries are discharged to a specified level, the trailer system is switched back to line power.

D. Meteorological Instrumentation

1. Ambient Air Monitoring Trailers

Four of the ambient air monitoring trailers are equipped with the following meteorological instrumentation: (1) dry bulb temperature (outside), (2) relative humidity, (3) wind direction, (4) wind speed, and (5) a tipping bucket, heated rain/snow gage. The temperature probe and relative humidity sensor are mounted inside a motor aspirated radiation shield, the Model 1S6 Aspirated Radiation Shield by Weather Measure, which gives an aspiration of approximately 100 cfm. The wind instrumentation and temperature and relative humidity apparatus (in the aspirated radiation shield) are all mounted atop a 33-foot crank-up meteorological tower (the WM-33, by Weather Measure) at each of the four trailer sites.

The wind instrumentation at the monitoring trailers consists of the Model W103/3L Lightweight Cup Anemometer by Weather Measure and the Model W104-2 Lightweight Vane by Weather Measure. The anemometer is a high response, low threshold wind system which offers the optimum in versatility and economy. For low threshold applications, a unique frictionless tachometer employing a high frequency oscillator and receiver is used to measure precisely wind speed. The oscillator, transmitter, and receiver are encapsulated in a small cube of epoxy for total protection against the environment. The high frequency tachometer embodies several distinct advantages over the commonly used light chopper systems. There are no light bulbs or photocells to burn out; power consumption is low; and the system is insensitive to moisture condensation or dust deposition. The solid state tachometer is essentially free from maintenance with a life of well over five years when operated continuously. The specifications of the W103 Cup Anemometer are as follows:

- Accuracy: ± 1% or .15 mph, whichever is greater.
- Bearings: Sealed and shielded precision stainless steel.
- Threshold: 0.6 miles per hour
- Distance Constant: 5 feet

The wind vane, the W104-2, is equipped with a 1000 ohm low torque potentiometer and two wipers for 0° to 540° operations. The response characteristics of this vane are:

- Dead Band: 0 degrees
- Damping Ratio: 0.4
- Distance Constant: 3.5 feet
- Threshold: 0.75 miles per hour
- Potentiometer Linearity: 0.5%

The thermistor probe used in the motor aspirated radiation shields is the Model T621-TP18X Air Temperature Premium Thermistor Probe by Weather Measure. This probe has a range of -50°C to $+50^\circ$C and an interchangeability of ± 0.055°C. The output signal accuracy is ± 0.3°F.

The relative humidity sensor is the Model 2013 Remote Reading Relative Humidity System by Texas Electronics. The sensor assembly contains a newly-developed hygroscopic inorganic sensing element. Its expansion and contraction positions the suspended core of a linear variable differential transformer (LVDT). The absence of friction inducing linkages and wiping contacts minimizes hysteresis and improves accuracy. The LVDT output signal, when processed, is directly proportional to relative humidity. The specifications of this instrument are as follows:

- Range of Indication: 0% to 100% RH
- Response: The sensor response time to a step change of 10% in relative humidity is less than 2 minutes with the sensor exposed to moving air.
- Accuracy: 5% - 15% RH; ± 5% RH
  15% - 95% RH; ± 2% RH
  95% -100% RH; ± 3% RH
- Signal Output: Analog signal of -150 mv. to +150 mv. with electrical zero at 50% RH is standard.

Each of the four monitoring trailers is equipped with a Model P511-E Remote Recording Heated Snow Gage by Weather Measure. In the case of this gage, the durability and reliability of a tipping bucket gage are combined with heavy-duty electric heaters to make this an all-purpose precipitation sensor. This gage may be used to measure snowfall and rainfall. An insulating cover of poly-vinyl chloride and a thermostatic control insure the proper gage temperature. The thermostatic control is adjustable from 0 to 35°C. Snow falling into the inlet funnel is melted. The resulting water (from rain or snow) drains into a precision tipping bucket mechanism which activates a mercury switch each time the bucket fills and tips. The gage is constructed of durable corrosion-resistant materials to provide many years of service. The specifications of this gage are as follows:

- Orifice: 8 inches
- Calibration: 0.01 inch
- Accuracy: 0.5% (Calibrated at 0.5 in/hr)
- Sensor: Chrome plated tipping buckets
- Switch: Mercury, 0.1 second closure
- Heat Control: Thermostat adjustment, 0 to 35°C.

2. 200-Foot Meteorological Tower

The tower has instrumentation at four levels: 8 feet, 30 feet, 100 feet, and 200 feet. At all four levels, there are: wind speed, wind direction, and temperature and relative humidity sensors in a power aspirated radiation shield. Temperature difference thermistors (also in power aspirated radiation shields) and their associated circuitry take lapse rate measurements for the 30-foot to 100-foot layer and the 30-foot to 200-foot layer. In addition, this site has a Precision Spectral Pyranometer, a barometer, and a tipping bucket rain/snow gage.

The wind direction and speed apparatus used at each measurement level of the tower is the Model 1074-2 wind sensor by Meteorological Research, Inc. (MRI). This sensor has a 540° potentiometer for wind direction and a light chopper for wind speed. This sensor is rugged, with an all-weather coaxial cup and damped vane assembly. The prototype model has been in operation for years under the most demanding weather conditions, performing continuously with the utmost reliability. All of the wind sensors on the tower have been specially treated with a black paint which will promote warming of the exposed surfaces of the sensor and thereby reduce ice and snow accumulations on the moving parts of the apparatus. The specifications on the Model 1074-2 are as follows:

Wind Speed

- Starting Threshold: 0.75 mph
- Response Distance: 18 feet (63% recovery)
- Flow Coefficient: 7.9 feet/Revolution
- Accuracy: ± 0.4 mph or 1% (whichever is greater)
- Range: 0-100 mph

Wind Direction

- Starting Threshold: 0.75 mph
- Delay Distance: 4 feet (50% recovery)
- Damping Ratio: 0.5 to 0.6
- Accuracy (540° system): ± 1%
- Range: 0° to 540°

The relative humidity and temperature sensors are mounted within a power aspirated radiation shield at each tower level. All aspirators and sensors are of the Model 840 Series by MRI. The aspirated shielded housing is designed to provide maximum radiation protection to the sensor. Ambient air is drawn into the shield and across the sensors at approximately 15 feet per second. This intake air is essentially sampled from a hemispherical space which is approximately 3-inch radius from the tube opening. Speed of the incoming air at the periphery of this hemisphere is approximately 1 mph.

The temperature sensor is comprised of a dual thermistor and resistor network. This circuit provides a linear resistance change with an air temperature change. The relative humidity sensor is placed alongside the temperature elements inside the shield where it is exposed to a constant flow of air. Circulation to both sides of the sensing element produces accurate monitoring with a good response time. The specifications on the sensing elements are as follows:

Temperature

- Accuracy: ± 0.25°C
- Range: -50°C to +50°C

Humidity

- Accuracy: ± 3.0% RH
- Range: 0% to 100% Relative Humidity

Measurements of temperature difference are taken for two layers, the 30-foot to 100-foot layer and the 30-foot to 200-foot layer. The thermistors and circuitry used for these measurements are separate from the thermistors measuring air temperature. The use of separate thermistors and circuitry to measure ΔT allows for much greater accuracy and resolution in the measurements, which is necessary for stability assessments. Two ΔT thermistors are at the 30-foot level, one is at the 100-foot level, and one is at the 200-foot level. All of these ΔT thermistors are mounted within power aspirated radiation shields. The specifications on the ΔT instrumentation are as follows:

- Accuracy: ± 0.1°C
- Range of ΔT Circuit
  (Lower Level-Upper Level): +4°F to -8°F

All instrumentation, except at the ground level, is mounted at the end of 12-foot retractable booms. These booms are 3-inch box beams which are on rollers and can be retracted to the instrument platforms for instrument maintenance.

The meteorological tower itself is a 200-foot Rohn Model 80 Guyed Tower, designed for 40 pounds per square foot wind load with ½" of radial ice per EIA Standard RS-222-B, to support four levels of meteorological equipment. The material consists of tower sections with a tapered base, three retractable booms 12-feet long, three outside work platforms, an inside ladder for climbing, two base ground kits and one anchor ground kit. The cable-type Safety Climbing Device consists of a cable and attachment mechanisms with a locking sleeve and safety belt. The tower is lighted and painted according to FAA specifications.

The signals from the tower instrumentation are fed from multiple signal cables into transmitters mounted at the base of the tower. After signals have been converted to analog signals, they are fed into a junction box, also at the tower base, where they are assimilated into one coaxial cable. The signals are then run underground within 3" PVC conduit to the A-to-D assembly, where they are processed. The transmitters are shielded and insulated from the elements. The signal cable is run underground in PVC conduit in order to minimize damage from the weather or various rodents in the region.

The auxiliary equipment at the tower site consists of a heated tipping bucket rain/snow gage, an analog barometer, and a Precision Spectral Pyranometer. The rain/snow gage is the Model P511-E unit by Weather Measure, with characteristics and specifications as described in Section 1. The barometer is the B242 Analog Output Barometer by Weather Measure. This barometer provides an output voltage that is linearly proportional to pressure. The specifications on this instrument, which is mounted inside the monitoring trailer at the site, are as follows:

- Range: Specially designed for the 100 millibar interval from 725 millibars to 825 millibars.
- Resolution: Infinite
- Linearity: ± 0.5 millibar, over the 100 millibar interval

The pyranometer at the site is the Eppley Precision Spectral Pyranometer. This instrument is used for the measurement of sun and sky radiation totally or in defined wavelength bands. The pyranometer is levelled and mounted atop a wooden stand 4½ feet from the ground surface. Care has been taken to eliminate the effects from all outside influences, such as reflection or shadows, on the pyranometer. The instrument characteristics are as follows:

- Sensitivity: 5 mv. per cal/cm^2/min
- Independence: 300 ohms
- Temperature dependence: Sensitivity constant to within ± 1 percent over the ambient temperature range from -20 to +40°C
- Linearity: Response linear up to intensities of 4 cal/cm^2/min
- Response Time: 1 second (i/e signal)

All instrumentation is factory calibrated and is field-calibrated at various intervals. Sling psychrometers are used to calibrate the humidity sensors, known temperatures and/or resistances are used to calibrate the thermistors, and an rpm calibrating unit is used to calibrate the anemometers. The wind direction instrumentation is aligned to true north (reference direction) by means of a surveyor's transit.

III. MICROMETEOROLOGICAL AND TERRAIN FEATURES

The Piceance Creek Valley and C-b Oil Shale Tract are situated such that many microscale meteorological phenomena affect the region where the ambient air monitoring units are located. In particular, the three units in the Piceance Creek Valley (Trailers 020, 021, and 022) are heavily influenced by a katabatic-anabatic flow regime. Trailer 023 and its associated 200-foot meteorological tower are located atop a plateau to the south of the valley, high enough to be affected mostly by gradient flow conditions. Trailer 024, located halfway between the valley and the meteorological tower, is affected by a mixture of the gradient and mountain-valley flow regimes.

Elevations in the monitoring network range from about 6200 feet above sea level at Trailer 021, near the Rock Creek School in the valley at the westernmost end of the monitoring network, to 6940 feet at the meteorological tower site (Trailer 023) atop the plateau within the Tract C-b itself. The largest gradients in elevation in this area, of course, occur at the Piceance Creek Valley walls. However, the northern valley walls are slightly steeper than those at the southern boundary of the valley, which then slopes upward gradually toward the C-b Tract. The Piceance Creek Valley decreases in elevation from east to west in this area, so that nighttime katabatic cold-air drainage flows advect from east to west, or from Trailer 022 to Trailer 020 to Trailer C21.

As mentioned at the outset of this discussion, the terrain will have a large influence on the meteorology of this region. Considering first Trailer 022, at the eastern end of the monitoring network, a nighttime katabatic (valley or downslope) flow will exert a tremendous influence on this site.

Of the three monitoring locations in the Piceance Creek Valley, this site has the steepest valley walls in its vicinity. As a result, the nighttime katabatic flow is strongest here. That is, the downslope winds are constrained or channelled at this point such that the nighttime drainage winds often reach 15 miles per hour. In addition, the channelling effects of the Piceance Creek Valley walls normally cause surface winds to flow from one of two preferred directions. At night, the downslope winds parallel the valley contours, generally coming from 115° (east-southeast, referenced to true north). During the afternoon, or whenever suitable pressure gradient conditions exist, the winds generally come from the west-northwest because of the boundary conditions and channelling caused by the valley. This monitoring location has an elevation of approximately 6450 feet above sea level and is at the mouth of Oldland Gulch.

Trailer 020, midway down the Piceance Creek Valley near the Redd Ranch, at the mouth of Gardenhire Gulch, has an elevation of about 6320 feet above sea level. Once again, the valley walls are steeper to the north of this monitoring location. The Piceance Creek Valley widens a little from Trailer 022 to Trailer 020, so that channelling effects are not quite as great at this location. Nevertheless, a well-developed katabatic-anabatic flow cycle affects this site, with the afternoon anabatic flow being fairly well-developed at this location. The channelling effects of the valley walls cause two preferred surface wind directions, southeast and northwest. However, other wind directions are experienced here, particularly during the transition periods between downslope and upslope flows and during periods when the surface pressure gradient dictates to a large degree the surface wind direction.

Trailer 021, located near the Rock Creek School, has the lowest elevation of the three valley trailers, 6200 feet. At this point, the Piceance Creek Valley widens considerably toward the east, so that nighttime katabatic winds are rather light. Daytime anabatic winds are also rather light. However, northwesterly surface winds caused by pressure gradient forces are occasionally moderate in force because of the slight channelling effects of the valley walls to the north and northwest.

Site 023, where the 200-foot meteorological tower is located, is atop the plateau at an elevation of about 6940 feet above sea level. It is approximately 2.5 miles south of the Piceance Creek Valley. This location is relatively high compared to its surroundings, with the nearest points having elevations greater than 7000 feet being .5 miles to the south of the tower. The tower itself is on the top of a small knoll located between Scandard and Sorghum Gulches. Because of its location and the irregularities of the surrounding terrain, meteorological patterns are varied here.

Wind instrumentation is mounted at four levels of the meteorological tower: 8 feet, 30 feet, 100 feet, and 200 feet. The top level of the tower generally remains in gradient wind flow. That is, the winds at that level are normally generated by synoptic-scale features and are usually separated from terrain features and micrometeorological circulations. Occasionally, a weak anabatic flow influence is experienced. However, such is not the case with the three lowest measurement levels. To varying degrees, these levels are influenced by both the katabatic and anabatic circulation cells. However, when strong pressure gradient forces exist in the region and the synoptic-scale wind flow is strong, all four tower levels will reflect a gradient wind flow, with the winds increasing in strength with increasing height.

Trailer 024 is between the Piceance Creek Valley and the meteorological tower location, about 1 mile south of the valley itself. The elevation of this site is approximately 6740 feet. The terrain slopes downward to the west, north, and east, and slopes upward toward the south, in the direction of the meteorological tower. This site is in a transition zone between the micrometeorological effects which prevail in the valley and those meteorological phenomena affecting the tower site. As a result, the meteorological parameters measured at this location are subject to rather rapid variations. The area is generally affected by a weak katabatic (downslope) flow at night and a weak anabatic (upslope) flow during the afternoon hours. However, gradient wind flows generally take precedence over terrain-induced flows at this location.

The terrain atop the plateau is generally barren and fairly rugged, with a few scattered small trees. The topsoil dries rapidly and is very fine, resulting in blowing dust when dry, windy conditions exist. In the Piceance Creek Valley, the terrain is fairly grassy and flat, with steep valley walls on either side. Surface winds are normally rather light in this valley unless channelling effects occur.

During clear nights with rather light pressure gradient-induced winds, rapid radiational cooling will occur in the region because of the barren nature of the terrain and the generally dry character of the air in this portion of the country. As a result, the diurnal range of temperatures will be extremely large. Because of the katabatic flow in the valley, nighttime temperatures will generally be lower in the valley than on the plateau. During the winter, especially, temperatures in the valley may be 20°F lower than they are on the plateau during the early morning hours. In particular, the drainage effects will be spectacular at Trailer 021, which will often experience temperatures 10°F cooler than those at the other valley monitoring locations during the early morning hours. This phenomenon results from the pooling of cold air in the area of Trailer 021 because of its relatively low elevation and the light nature of the winds here during the night, which thus inhibits surface mixing and promotes the strengthening of the nighttime ground-based inversion. During periods of strong gradient winds and/or cloudy skies, greater mixing of the air near the surface occurs and meteorological conditions (particularly temperature and humidity) are more uniform throughout the monitoring network (on the plateau and in the valley).

IV. OPERATING TIME ANALYSIS FOR EACH SITE

This section presents the operating statistics for each of the major subsystems contained in each monitored station. Table II shows the specific number of hours that each of these subsystems was inoperative for the month. The column labeled "COMPUTER" indicates the entire data acquisition system and downtime hours appearing in this column and, therefore, means total loss of data. These instances include, in addition to computer downtime, power failures, no power available, and self-automated shutdown periods such as during air conditioner malfunctions.

Calibration time is not considered to be downtime and is, therefore, not included in the downtime figures. The amount of time used in calibrating the instruments is given at the bottom of the downtime analysis table and is reported as total calibration hours for each channel for the entire month. As is evident in the calibration figures, channels can be calibrated independently of one another. No calibration time is given for particulate monitoring since Hi-Vol calibration occurs infrequently and only during the off-duty cycle for each Hi-Vol while another Hi-Vol is taking data.

TABLE II.
DOWNTIME HOURS FOR C-B OIL SHALE TRACT MONITORING PROJECT

TRAILER 02[illegible]

DATE	COMPUTER	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	WS	WD	RH	TEMP
11/ 1	1.	0.	0.	0.	24.	0.	19.	19.	13.	0.	0.	0.	0.	0.
11/ 2	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
11/ 3	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
11/ 4	1.	1.	11.	1.	24.	1.	23.	23.	23.	11.	1.	1.	0.	0.
11/ 5	1.	1.	2.	1.	24.	1.	20.	20.	14.	14.	1.	1.	0.	0.
11/ 6	0.	1.	1.	1.	24.	0.	22.	22.	1.	1.	1.	1.	0.	0.
11/ 7	0.	1.	1.	1.	24.	1.	1.	1.	1.	1.	1.	1.	0.	0.
11/ 8	0.	1.	1.	1.	24.	1.	1.	1.	1.	1.	1.	1.	0.	0.
11/ 9	0.	0.	0.	0.	24.	0.	9.	9.	8.	0.	0.	0.	0.	0.
11/10	0.	1.	1.	24.	24.	21.	23.	23.	23.	0.	0.	0.	0.	0.
11/11	0.	1.	1.	4.	24.	11.	23.	23.	23.	1.	0.	0.	0.	0.
11/12	0.	0.	0.	0.	24.	0.	24.	24.	24.	0.	0.	0.	0.	0.
11/13	0.	0.	0.	0.	24.	0.	23.	23.	23.	0.	0.	0.	0.	0.
11/14	0.	0.	0.	0.	24.	1.	12.	12.	12.	0.	0.	0.	1.	1.
11/15	0.	1.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/16	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/17	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/18	0.	1.	1.	1.	24.	0.	1.	1.	1.	1.	1.	1.	0.	0.
11/19	15.	0.	0.	0.	24.	0.	1.	1.	0.	0.	0.	0.	0.	0.
11/20	0.	0.	0.	0.	24.	0.	11.	11.	12.	0.	0.	0.	0.	0.
11/21	0.	1.	1.	0.	24.	0.	7.	7.	0.	1.	0.	0.	0.	0.
11/22	1.	0.	0.	0.	24.	0.	9.	9.	0.	0.	0.	0.	0.	0.
11/23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/24	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/25	0.	1.	1.	1.	24.	1.	1.	1.	1.	1.	1.	1.	0.	0.
11/26	0.	1.	1.	1.	0.	1.	1.	1.	2.	1.	0.	0.	0.	0.
11/27	1.	0.	0.	1.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/28	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/29	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	2.
11/30	0.	0.	0.	0.	24.	0.	1.	1.	1.	0.	0.	0.	0.	0.
CALIBRATION TIME		3.	3.	2.		2.	5.	5.	5.	2.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER #21

DATE	DIGITIZING SYSTEM	SO2	PART	H2S	WS	WD	RH	TEMP
11/ 1	1.	0.	0.	12.	0.	0.	0.	0.
11/ 2	0.	0.	24.	0.	0.	0.	0.	0.
11/ 3	0.	0.	24.	14.	0.	0.	0.	0.
11/ 4	0.	10.	24.	10.	0.	0.	0.	0.
11/ 5	4.	14.	24.	20.	0.	0.	0.	0.
11/ 6	11.	0.	24.	0.	0.	0.	0.	0.
11/ 7	0.	0.	24.	0.	0.	0.	0.	0.
11/ 8	0.	0.	24.	0.	0.	0.	0.	0.
11/ 9	0.	13.	24.	0.	0.	0.	0.	0.
11/10	0.	12.	24.	0.	0.	0.	0.	0.
11/11	0.	0.	24.	0.	0.	0.	0.	0.
11/12	1.	0.	24.	0.	0.	0.	0.	0.
11/13	0.	1.	24.	1.	0.	0.	0.	0.
11/14	0.	0.	24.	0.	0.	0.	0.	0.
11/15	0.	0.	24.	1.	0.	0.	0.	0.
11/16	0.	0.	24.	0.	0.	0.	0.	0.
11/17	0.	0.	24.	0.	0.	0.	0.	0.
11/18	0.	0.	24.	0.	0.	0.	0.	0.
11/19	1.	1.	24.	1.	0.	0.	0.	0.
11/20	0.	0.	24.	0.	0.	0.	0.	0.
11/21	0.	0.	0.	24.	0.	0.	0.	0.
11/22	0.	0.	0.	24.	0.	0.	0.	0.
11/23	0.	0.	0.	24.	0.	0.	0.	0.
11/24	0.	0.	0.	12.	0.	0.	0.	2.
11/25	11.	0.	0.	0.	0.	0.	0.	0.
11/26	0.	0.	24.	0.	0.	0.	0.	0.
11/27	0.	0.	0.	11.	0.	0.	0.	1.
11/28	0.	0.	24.	11.	0.	0.	0.	1.
11/29	13.	0.	24.	0.	0.	0.	0.	0.
11/30	0.	0.	24.	0.	0.	0.	1.	0.
CALIBRATION TIME		2.		2.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B OIL SHALE TRACT MONITORING PROJECT

TRAILER #22

DATE	COMPUTER	SO2	PART	H2S	WS	WD	RH	TEMP
11/ 1	0.	1.	24.	1.	0.	0.	0.	0.
11/ 2	0.	0.	24.	0.	0.	0.	0.	0.
11/ 3	9.	0.	24.	0.	0.	0.	0.	0.
11/ 4	1.	0.	24.	0.	0.	0.	0.	0.
11/ 5	0.	0.	24.	0.	0.	0.	0.	0.
11/ 6	0.	0.	24.	0.	0.	0.	0.	0.
11/ 7	0.	0.	24.	0.	0.	0.	0.	0.
11/ 8	1.	1.	24.	1.	1.	1.	1.	4.
11/ 9	0.	0.	24.	0.	0.	0.	0.	0.
11/10	0.	0.	24.	0.	0.	0.	0.	0.
11/11	0.	0.	24.	0.	0.	0.	0.	0.
11/12	0.	0.	24.	0.	0.	0.	0.	0.
11/13	0.	0.	24.	0.	0.	0.	0.	0.
11/14	0.	0.	24.	0.	0.	0.	0.	0.
11/15	0.	1.	24.	1.	1.	1.	1.	1.
11/16	0.	0.	24.	0.	0.	0.	0.	0.
11/17	0.	0.	24.	0.	0.	0.	0.	0.
11/18	1.	0.	24.	0.	0.	0.	0.	1.
11/19	0.	0.	24.	0.	0.	0.	0.	0.
11/20	0.	0.	24.	0.	0.	0.	0.	0.
11/21	0.	0.	24.	0.	0.	0.	0.	0.
11/22	0.	0.	24.	0.	0.	0.	0.	0.
11/23	0.	0.	24.	0.	0.	0.	0.	0.
11/24	0.	0.	0.	0.	0.	0.	0.	0.
11/25	0.	0.	0.	0.	0.	0.	0.	0.
11/26	0.	0.	0.	0.	0.	0.	0.	0.
11/27	0.	0.	0.	0.	0.	0.	0.	0.
11/28	0.	0.	0.	0.	0.	0.	0.	0.
11/29	1.	0.	0.	0.	0.	0.	0.	0.
11/30	1.	0.	24.	0.	1.	0.	0.	0.
CALIBRATION TIME		1.		1.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B OIL SHALE TRACT MONITORING PROJECT

TRAILER 223

DATE	COMPUTER	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	8-FT WS	8-FT WD	8-FT RH	8-FT TEMP	PYR
11/ 1	0.	0.	0.	0.	0.	0.	24.	24.	7.	17.	24.	24.	0.	0.	0.
11/ 2	1.	0.	0.	1.	24.	0.	16.	16.	16.	0.	23.	23.	0.	0.	0.
11/ 3	0.	0.	0.	0.	24.	0.	1.	1.	0.	1.	24.	24.	0.	0.	0.
11/ 4	0.	1.	1.	1.	24.	1.	9.	9.	1.	9.	24.	24.	0.	0.	0.
11/ 5	0.	1.	1.	0.	24.	0.	24.	24.	0.	24.	24.	24.	0.	0.	0.
11/ 6	1.	0.	0.	1.	24.	0.	15.	15.	1.	15.	23.	23.	0.	0.	0.
11/ 7	0.	0.	0.	1.	24.	0.	1.	1.	1.	2.	24.	24.	0.	0.	0.
11/ 8	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	24.	24.	0.	0.	0.
11/ 9	1.	0.	0.	0.	24.	0.	10.	10.	0.	10.	23.	23.	0.	0.	0.
11/10	0.	1.	1.	24.	24.	0.	20.	20.	20.	20.	24.	24.	0.	0.	0.
11/11	0.	7.	7.	24.	24.	2.	8.	8.	23.	23.	24.	24.	0.	0.	0.
11/12	1.	2.	2.	23.	24.	0.	18.	16.	23.	23.	23.	23.	1.	1.	1.
11/13	0.	1.	1.	23.	24.	20.	24.	24.	24.	23.	24.	24.	0.	0.	0.
11/14	0.	0.	0.	14.	24.	14.	24.	24.	15.	22.	24.	24.	0.	0.	0.
11/15	1.	0.	0.	0.	24.	0.	12.	12.	12.	0.	11.	11.	0.	0.	0.
11/16	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/17	0.	2.	2.	0.	24.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.
11/18	0.	1.	1.	2.	24.	1.	19.	19.	3.	6.	2.	2.	0.	0.	0.
11/19	2.	9.	9.	1.	24.	1.	13.	13.	10.	12.	1.	1.	0.	0.	0.
11/20	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/21	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/22	6.	0.	0.	0.	24.	0.	0.	0.	0.	0.	9.	9.	0.	0.	0.
11/23	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	12.	12.	0.	0.	0.
11/24	0.	0.	0.	0.	24.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
11/25	1.	1.	1.	0.	24.	0.	23.	23.	3.	22.	0.	0.	0.	0.	0.
11/26	1.	1.	1.	1.	24.	1.	1.	1.	1.	22.	0.	0.	0.	0.	0.
11/27	1.	1.	1.	0.	0.	0.	1.	1.	1.	22.	0.	0.	1.	0.	0.
11/28	0.	0.	0.	2.	24.	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.
11/29	0.	0.	0.	1.	0.	0.	0.	24.	0.	24.	0.	0.	0.	1.	1.
11/30	7.	0.	0.	0.	24.	0.	0.	0.	0.	17.	0.	0.	1.	0.	0.
CALIBRATION TIME		1.	2.	2.		2.	2.	2.	2.	2.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 023

DATE	DIGITIZING SYSTEM	30-FT WS	30-FT WD	30-FT RH	30-FT TEMP	100-FT WS	100-FT WD	100-FT RH	100-FT TEMP	200-FT WS	200-FT WD	200-FT RH	200-FT TEMP	DT1	DT2
11/ 1	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/ 2	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/ 3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	0.
11/ 4	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	0.
11/ 5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.
11/ 6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/ 7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/ 8	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/ 9	1.	0.	0.	0.	0.	0.	0.	0.	2.	0.	0.	0.	2.	0.	0.
11/10	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/11	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/12	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/13	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/14	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/15	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/16	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/17	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11/18	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.
11/19	2.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.
11/20	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.
11/21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
11/22	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
11/23	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.	0.	0.	24.
11/24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
11/25	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
11/26	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
11/27	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	24.
11/28	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	19.	24.
11/29	0.	0.	0.	0.	1.	0.	0.	0.	0.	1.	1.	1.	1.	24.	0.
11/30	7.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	17.	0.
CALIBRATION TIME		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B OIL SHALE TRACT MONITORING PROJECT

TRAILER #24

DATE	COMPUTER	SO2	PART	H2S	WS	WD	RH	TEMP
11/ 1	6.	0.	24.	0.	18.	18.	0.	18.
11/ 2	12.	0.	24.	0.	11.	11.	0.	11.
11/ 3	0.	12.	24.	12.	24.	24.	0.	24.
11/ 4	0.	17.	24.	17.	17.	17.	0.	24.
11/ 5	0.	0.	24.	0.	0.	0.	0.	24.
11/ 6	0.	0.	24.	0.	0.	0.	0.	24.
11/ 7	0.	0.	24.	0.	0.	0.	0.	24.
11/ 8	0.	0.	24.	0.	0.	0.	0.	24.
11/ 9	0.	0.	24.	0.	0.	0.	0.	24.
11/10	0.	0.	24.	0.	0.	0.	0.	24.
11/11	0.	0.	24.	0.	0.	0.	0.	24.
11/12	1.	0.	24.	0.	0.	0.	0.	23.
11/13	0.	0.	24.	0.	0.	0.	0.	24.
11/14	0.	1.	24.	0.	0.	0.	0.	24.
11/15	1.	0.	24.	0.	0.	0.	0.	23.
11/16	0.	0.	24.	0.	0.	0.	0.	24.
11/17	11.	0.	24.	0.	0.	0.	0.	12.
11/18	12.	0.	24.	0.	0.	0.	0.	11.
11/19	0.	1.	24.	0.	0.	0.	0.	24.
11/20	0.	0.	24.	0.	0.	0.	0.	24.
11/21	0.	0.	24.	0.	0.	0.	0.	24.
11/22	0.	0.	24.	0.	0.	0.	0.	24.
11/23	0.	0.	24.	0.	0.	0.	0.	24.
11/24	0.	0.	24.	0.	0.	0.	0.	24.
11/25	0.	7.	0.	0.	0.	0.	0.	24.
11/26	0.	17.	24.	0.	1.	0.	0.	24.
11/27	0.	0.	0.	0.	0.	0.	0.	24.
11/28	0.	0.	24.	0.	0.	0.	0.	24.
11/29	0.	0.	0.	0.	0.	0.	0.	24.
11/30	0.	0.	24.	0.	0.	0.	0.	24.
CALIBRATION TIME		0.		0.	0.	0.	0.	0.

V. MONTHLY METEOROLOGICAL SUMMARY

A. Summary of the Major Features of the General Circulation over North America

During the month of November, the general circulation over the United States was fairly normal. That is, in general, the various sections of the country did not experience prolonged periods of abnormally extreme cold or heat. In addition, most sections of the nation did not deviate appreciably from monthly precipitation norms. The long wave circulation in the upper atmosphere generally alternated between periods of zonal and meridional flow during the month. Split flow dominated the upper flow from November 1st through November 6th. Otherwise, meridional or zonal flow regimes prevailed. Zonal flow, or west-to-east flow which promotes rapid variations of a rather weak nature in the meteorological conditions in a region, occurred in the United States from November 7th through the 9th, the 16th through the 23rd, and on November 30th. Meridional flow, or north-south flow which causes rather extreme meteorological conditions (hot or cold, depending on relative location in the circulation pattern) of a rather persistent nature, existed from November 10th through the 15th and from November 24th through the 29th.

The results of these circulation patterns over the various sections of the country during November were fairly uniform. In general, much of the nation had temperatures which were above normal for the month and monthly precipitation totals which were also slightly above normal. Specifically, the north central portion of the country, including the upper Midwest and Ohio Valley, had temperatures and monthly precipitation totals which were slightly above normal. The Northeast had near normal temperatures but below normal precipitation. The Atlantic seaboard region had temperatures and precipitation totals which were slightly above normal for the month, while the South had near normal temperatures and slightly above normal precipitation. The central portion of the United States had above normal temperatures and slightly above normal precipitation during the month. Meanwhile, the Rocky Mountain region and Intermountain Region had slightly below normal temperatures and precipitation totals which were slightly above normal. The Southwest also had temperatures which averaged slightly below normal, but had above average precipitation. Finally, the West and Pacific coast areas had temperatures which were much higher than monthly normals and precipitation totals which were above normal.

No extremely cold Arctic air masses advected south of the Canadian border during the month. The mean position of the long wave trough over North America was through the west central United States during November, while a weak mean ridge was situated on a north-south line through the eastern portion of the nation.

November began with a broad upper troughing pattern over the western United States, with ridging over the Atlantic seaboard. The split flow conditions caused one large upper low pressure area over northeastern Wyoming and another over northern California. A stationary front extended from the Great Lakes to southern Texas and a cold front extended southward from a surface low over eastern Nevada. Precipitation was scattered throughout the western half of the nation and also along the stationary front from Texas to Indiana. Skies were overcast in western Colorado in the vicinity of Tract C-b on the 1st and rain and snow showers were widespread throughout the area.

November 2nd was much the same. The upper low in Wyoming moved northeastward to the North Dakota-Canada border and the upper low in the Southwest strengthened slightly and moved southward to southern California. A surface high pressure region began to build (anticyclogenesis) over the western portion of the nation. The stationary front through Texas moved northward as a warm front to a position along the Red River Valley, while the low over Nevada moved to southern Arizona. Precipitation was widespread across the western three-fourths of the nation. Cloudiness decreased somewhat in western Colorado, but scattered rainshowers still persisted in the region.

On November 3rd, the upper low in the Southwest moved to northwestern Arizona and filled slightly. Meanwhile, an upper ridge began to build into the Pacific Northwest. A stationary front extended from the Great Lakes to southwestern Texas. Precipitation, much of it heavy, covered the entire midsection of the country. High pressure continued to build into the western portion of the nation. Colder air advected into western Colorado, with rain, snow, and fog persisting throughout the area of the Tract C-b during the day.

The split flow regime continued on November 4th, as the upper ridge in the Northwest continued to strengthen. Weak upper lows were centered over western Kansas and western Utah. A cold front extended from New York to a low over Arkansas and then southwestward to southern Texas. Precipitation was heavy in a broad band from southern Texas northeastward to the Great Lakes, with many precipitation totals exceeding one inch. Western Colorado continued under a moderate high pressure regime at the surface, although a very weak surface low was centered over southeastern Utah. Middle cloudiness and a few light showers were scattered throughout the area of the Tract C-b.

The split flow pattern began to break somewhat by November 5th. A strong upper low was centered over Iowa and a very weak upper low was over southwestern Utah. An upper ridge extended from Oregon to Montana. A strong long wave trough began to deepen at about 150°W longitude. At the surface, a weak cold front extended southward from a low pressure center over the Great Lakes to Alabama and then into the Gulf of Mexico. An occluded front made its way onto the Washington coast. Precipitation was confined to the eastern third of the nation and to the Pacific Northwest. Weak high pressure at the surface covered the eastern two-thirds of the country. Skies cleared in western Colorado with only a few scattered middle clouds dotting the sky.

November 6th marked the end of the split flow regime over the western portion of the United States as zonal flow began to establish itself. Upper lows were centered over Illinois and the Arizona-Utah border, while an upper ridge extended from Nebraska to Minnesota. Precipitation occurred in Texas, along the Gulf Coast, in the Northeast, and in the Pacific Northwest. On the surface, the cold front moved off the Atlantic coast, while the occlusion in the Northwest remained essentially stationary. A weak surface high centered in Kansas dominated the circulation throughout the nation. Generally fair weather prevailed in western Colorado, with some scattered middle cloudiness in the area during the morning.

A zonal circulation prevailed on November 7th, with a strong upper low in the East and a weak upper cyclonic circulation centered in southern Colorado. A weak upper ridge extended northward from Mississippi to Wisconsin. A short wave moved onto the Pacific coast. A large weak anticyclone was over eastern Missouri at the surface. A maritime polar cold front extended through Washington and a weak continental polar front dropped southward into Montana. Precipitation was widespread in the Pacific Northwest, Texas and its adjoining states, and in the Great Lakes region. Skies were clear in western Colorado, with a very small high pressure cell centered over central Colorado.

By November 8th, an upper level short wave had advanced rapidly eastward to an Idaho-southern California line. Upper lows were located over Missouri and off the Atlantic seaboard. A cold front extended southward from a low in Alberta, Canada, to Nevada. Precipitation was widespread throughout the Gulf coast states, Texas, and the Intermountain Region. The cold front passed through the Tract C-b region around noon. Cloudiness increased during the day and a steady rain began to fall during the evening.

The short wave moved eastward and dug southward on November 9th as the upper circulation began to exhibit some meridional flow characteristics. An upper ridge extended from southeast Texas to an upper high over the Great Lakes, while the upper trough was located on a Montana-Arizona axis. A cold front extended through the northern Plains states and another weak maritime polar cold front came onshore in Washington. Weak high pressure dominated the eastern half of the nation. Precipitation occurred in Florida, the Pacific Northwest, and over a large section of the nation's midsection extending from Texas to Minnesota and from eastern Utah to Missouri. Cloudiness covered western Colorado during most of the 9th and light rain fell during the morning hours.

The upper flow became meridional by November 10th, as the long wave trough dug southward along a Montana-west

Texas axis. Long wave ridges were located along the Pacific and Atlantic coasts of the United States. The cold front continued its eastern advance through the Midwest, extending along a Minnesota-Central Texas line during the morning. The cold front in the Northwest began to undergo frontolysis (decay) because of decreasing upper level support. A warm front moved northward from the Gulf of Mexico into southeastern Texas. Precipitation was scattered through the Pacific Northwest and the Intermountain Region. Precipitation was also concentrated along the cold front in a broad band from Texas to the western Great Lakes. In western Colorado, skies were overcast during the morning and some snow flurries occurred, but skies began to break by the afternoon as high pressure built into the area.

The meridional pattern amplified on the 11th, with a major trough through the center of the United States and strong upper ridges in the West and East. A strong cold front extended southward from a low over the western Great Lakes region through the Mississippi Valley to a low in southern Alabama, from which a cold front extended southward into the Gulf of Mexico. Precipitation extended northward along this front in a rather wide band. A large high pressure cell dominated the western half of the nation, bringing clear skies and light winds. Western Colorado likewise had clear skies and mild temperatures on this day.

This meridional pattern changed little on November 12th. The long wave trough and western ridge retained their amplitude and moved eastward slowly. High pressure continued to dominate the western two-thirds of the country and precipitation was confined to the Atlantic seaboard, Great Lakes, and Ohio Valley regions. However, a strong short wave began to dig southeastward through the upper ridge in British Columbia, portending a strong continental polar outbreak.

Skies were generally fair (high cloudiness) and temperatures were mild in the Tract C-b region.

The meridional long wave pattern amplified on the 13th as the short wave dug southeastward swiftly on the upstream side of the trough. Cold continental polar air streamed southward down the lee side of the Rockies behind a cold front extending from a low in Kansas to Colorado and then northwestward to Washington. Precipitaion covered the northern portions of the country. The cold front passed through the Tract C-b region during the afternoon, lowering temperatures slightly. Skies remained fair.

The meridional pattern continued on November 14th, although the amplitude of the circulation was somewhat reduced. An upper ridge dominated the West while a major trough covered the eastern half of the nation with cloudiness and precipitation. The continental polar cold front continued its southward march, pushing into the Atlantic Ocean and Gulf of Mexico by nightfall. A weak maritime polar cold front moved into the Pacific Northwest. The moderate continental polar cold front retreated eastward out of the Tract C-b region during the day. Broken middle and high cloudiness advected over the area throughout the day. Temperatures were mild.

The meridional circulation pattern of the five preceding days began a transformation into a zonal flow on the 15th, as the ridge in the West flattened and the eastern trough began to lose amplitude. A weak cool front extended westward from a small low pressure center in Wyoming. High pressure covered most of the nation. Precipitation was confined to the Northeast. Middle and high cloudiness covered western Colorado as mild temperatures continued in that region.

Zonal flow re-established itself over the United States on November 16th. A short wave, located on a Minnesota-New Mexico axis during the morning, moved through the center of the nation, causing widespread precipitation throughout the western half of the country. High pressure and light winds covered most of the country. Mild, fair weather prevailed in the vicinity of Tract C-b.

Zonal flow continued on the 17th as numerous short waves progressed eastward across the country. Short waves were located in the Ohio Valley (a rather strong system), Texas, the northern Plains, and the Northwest. A weak continental polar cold front was in the northern Plains and a maritime polar cold front moved eastward onto the Washington coast on this day. Precipitation covered the eastern third of the nation as well as the Pacific Northwest.

The short waves continued their eastward progression on the 18th. The strongest of these waves was located in the Northwest. The weak continental polar cold front in the northern Plains remained fairly stationary, while the maritime polar cold front progressed eastward to a Montana-central California line. Precipitation was scattered through all areas of the country except the Southwest. Cloudiness increased throughout the day in western Colorado. The maritime polar cold front passed through the Tract C-b during the evening, bringing scattered showers and a few thundershowers to the region.

The upper flow became a bit more organized on the 19th, with a long wave trough through the center of the United States and minor ridges along the West and East coasts.
The maritime polar cold front extended southward from Minnesota to Kansas and then curved into the Texas Panhandle and New

Mexico. High pressure began to build in the West behind the front. Precipitation occurred throughout the eastern half of the nation, in the Northwest, and in the Intermountain Region. After some snow pellets during the early morning in western Colorado, skies cleared gradually during the day, becoming virtually clear during the evening.

The short wave trough moved eastward to a Minnesota-Louisiana axis by November 20th as an upper ridge built northward over the Intermountain Region. On the surface, a cold front extended southward from a low over the Great Lakes region to Louisiana and then to the southern tip of Texas. A high pressure system, centered in western Colorado, affected the western half of the United States with its circulation. Precipitation amounts were large throughout the eastern third of the country. The Pacific Northwest also had precipitation. Skies were fair in western Colorado, but temperatures were rather cool.

The short wave troughs and ridges continued their eastward progression and by the 21st, short wave troughs were located off the Atlantic and Pacific coasts while a ridge extended northward from Texas to North Dakota. A cold front and low pressure system were located just off the coast of northern California. Precipitation was confined to the Northeast and the West. High pressure dominated most of the nation. The Tract C-b region had mostly fair skies on the 21st, with some scattered to broken middle and high cloudiness over the area.

The zonal upper flow pattern continued its eastward progression on the 22nd, as the Pacific short wave system advanced inland to an Idaho-southern California axis. The maritime polar cold front associated with this short wave extended from southeastern Montana to southern California by the morning of the 22nd. Another cold front, a continental polar front, dipped into Montana and North Dakota from Canada. Precipitation covered the western third of the nation and the Northeast. Cloudiness increased throughout the day in western Colorado and the cold front passed the Tract C-b region late in the afternoon. A few scattered showers fell during the evening.

The upper flow began to change from zonal to meridional characteristics on the 23rd. A strong short wave trough dug southward over the Intermountain Region on this day while upper ridges built northward over the eastern and western portions of the nation. On the surface, a maritime polar front extended southward into Texas from a low in Kansas. In addition, a relatively strong continental polar cold front rushed southward through the central Plains states. High pressure dominated the East and the West. Precipitation fell in the Pacific Northwest, the Rockies, and throughout the central portion of the nation. Some snow and rain fell during the early morning in western Colorado, but skies cleared during the late morning hours and remained clear for the rest of the 23rd.

The upper circulation became meridional on the 24th as the troughs and ridges amplified rapidly. Long wave ridges were located along the Atlantic coast and in the western United States while long wave troughs dug southward through the central United States and near 140°W longitude. The maritime and continental polar cold fronts of the 23rd merged into one cold front which extended from the Great Lakes to southern Texas. A weak high pressure system dominated the western half of the country. Precipitation on this day was confined to the Pacific Northwest and along the length of the cold front.

Western Colorado enjoyed fair skies and cool temperatures because of the high pressure system centered in northwestern Colorado.

Meteorological systems moved rapidly on November 25th, as the long wave trough through the central United States moved eastward, as did the upstream ridge and trough. As a result, a strong short wave pushed eastward to a position from Washington to southern California by the morning of the 25th. The surface maritime polar cold front accompanying this short wave extended from Idaho to central California at this time and was moving eastward rapidly. High pressure dominated the central portion of the United States as precipitation was confined to the Atlantic seaboard, the Northwest, and the Pacific Northwest. Western Colorado remained fair throughout the day, with some high cloudiness advecting over the area during the morning. Skies were clear during the remainder of the day. The maritime polar cold front passed through the Tract C-b region during the evening of the 25th, lowering temperatures somewhat.

The eastward progression of the long wave systems continued on the 26th of November. Large amplitude troughs were located in New England and on an Alberta, Canada, to Texas axis, while sharp ridges extended from Missouri to Minnesota and northward into Canada and also long the Pacific coast, northward into British Columbia. A cold front extended southward from Canada into Minnesota and from there into Oklahoma, at which point it curved westward into New Mexico. High pressure cells dominated the Ohio and Mississippi Valley regions and also the western third of the country. Precipitation was scattered throughout the northern third of the nation. Clear skies and cool temperatures prevailed in the Tract C-b area.

Short waves and upper level lows moving eastward in the meridional long wave troughing pattern were the major meteorological forces on November 27th. Upper lows were centered just north of Maine, just north of Minnesota, and in southern Washington on the morning of the 27th. One cold front extended from the Great Lakes to Tennessee and southwestward into central Texas on this day while another maritime polar cold front extended from Oregon southwestward into northern California. A weak high pressure system dominated the Plains states and the Intermountain Region. Precipitation was confined to the Great Lakes region, New England, and the Pacific Northwest. High cloudiness increased throughout the day in western Colorado in advance of the approaching upper low and surface cold front. A middle overcast covered the Tract C-b area by evening; temperatures remained cool.

Rapid changes took place on November 28th. The upper low in Washington moved to a position over northern Utah and strengthened, while the other two upper lows over North America also strengthened but remained stationary. Meanwhile, the upper ridge over the Pacific Northwest amplified dramatically, which caused surface anticyclogenesis in southern Canada and the northwestern portion of the United States. The development of this large cold continental polar high cell caused a new frontal system to form from the Texas Panhandle westward to northern Arizona. Cold air streamed southward over the northwestern half of the United States. Precipitation, mainly in the form of snow, occurred in the Great Lakes region and in the central Rockies and Intermountain Region. Western Colorado was cloudy throughout the 28th, with intermittent snow showers. Rather cold air advected into the area during the day. Clearing took place in western Colorado during the evening.

The deep long wave trough and strong upper ridge progressed eastward during the 29th as a transition to zonal flow over the United States began. The upper trough extended from Minnesota to New Mexico while the upper ridge extended northward from California to Alberta, Canada. The upper low over Utah filled as the trough was propelled eastward. A cold front extended from Tennessee to Arkansas and then into southern Texas. A large cold high cell centered just north of North Dakota dominated the weather over the western two-thirds of the nation. Precipitation, much of it in the form of snow, occurred from the Rockies eastward to the Mississippi Valley and southward to the Gulf of Mexico, and snow flurries occurred in the lee of the Great Lakes. Skies were clear throughout the day in the Tract C-b region, but very cold air continued to affect the area.

By November 30th, the upper circulation had changed to a basically zonal pattern. An intense upper low was centered over northern Missouri with a strong upper ridge over the Intermountain Region. On the surface, a large, complex low system was beginning to organize over the Southeast while a strong ridge of high pressure extended from North Dakota to southern Texas. Cold continental polar air and high pressures dominated the western two-thirds of the United States. The eastern half of the United States was covered by cloudiness and precipitation. Snows occurred in the Rockies. Heavy snow fell in Missouri, Illinois, and Iowa. Skies were fair throughout the day in western Colorado but very cold air persisted in the Tract C-b region.

B. Summary of Meteorological Statistics in Western Colorado during November

The area of western Colorado in the vicinity of the Tract C-b had below normal temperatures and above normal precipitation during the month of November. The area experienced five cold frontal passages during November (November 8, 13, 18, 22, and 25). In addition, the passage of an upper trough on November 28th brought extremely cold air into the region. Precipitation fell in the area on twelve separate days of November (November 1, 2, 3, 4, 8, 9, 10, 18, 19, 22, 23, and 28). Of these precipitation occurrences, five involved snowfall in the area of the Tract C-b (November 1, 3, 19, 23, and 28).

In general, the first twelve days of November had slightly below normal temperatures. From the 13th through the 26th, temperatures were generally near to slightly above normal. From the 28th through the 30th of November, the Tract C-b experienced temperatures well below normal.

The region experienced about 75 percent of the possible insolution during the month. Cloud cover (all types, but mostly high clouds) averaged 5.1 out of a possible 10 during the period from sunrise to sunset in the region and 4.5 out of a possible 10 for all 24-hour midnight to midnight periods during the month. The area experienced a total of twelve clear days, six partly cloudy days, and twelve cloudy days during November. Thunderstorms were scattered over the region on November 18th. Grand Junction, Colorado, about sixty miles to the south-southwest of the Tract C-b, measured 1.18 inches of precipitation during November, which is .57 inches above normal for the month.

The following is a summary of all official FKUS Air Stagnation Narratives issued by the National Weather Service during November which pertain to the Tract C-b region. These messages were received over the National Weather Service's "C" Service Teletype Circuit, to which Radian subscribes via a terminal in its Austin facilities.

- November 7th: "Gradual flattening of the upper ridge over the Southwest in conjunction with the surface high will result in localized marginal dispersion over sections of California, eastern Nevada, Utah, western Colorado, Arizona and New Mexico today..." "Localized dispersion problems due to weak low level gradients through the interior Southwest will improve rapidly after the morning of November 8th..."

- November 13th: "The ridge over the Pacific Northwest is forecast to weaken and be forced southeast, spreading stagnation into the Great Basin and Idaho tonight...stagnation in the Great Basin will affect mainly night and morning dispersion conditions."

- November 14th: "A short wave moving into Colorado by Friday evening will cause weakening of the ridge in the West..."

- November 22nd: "In the wake of the upper trough moving out of the Rockies, computerized upper level progs show some ridging from California to Colorado by the morning of the 24th. This, in conjunction with the surface high and its associated light low level winds, may result in some marginal dispersion conditions in the usually susceptible areas in sections of California, Nevada, Utah, and Colorado during the next 36 to 48 hours. Low mixing heights during the late night and early morning hours will also support this stagnation although transport winds will generally be above the required minimums..."

C. Discussion of the Meteorological Conditions in the Monitoring Network during November

Cold temperatures and periods of snowfall became rather common in the ambient air monitoring network in and around the Tract C-b during the month of November. Average temperatures in the network ranged from 26.7°F at Trailers 020 and 021 in the Piceance Creek Valley to 33.3°F at the 200-foot level of the meteorological tower at Trailer 023 on the Tract C-b itself. Winds during the month were moderate in force on the plateau around the meteorological tower and rather light in the Piceance Creek Valley, where katabatic and anabatic (downslope and upslope, respectively) circulation cells accounted for much of the wind. Monthly average relative humidities both on the plateau and in the valley ranged between 60 and 70 percent. Vector wind directions were southeasterly in the Piceance Creek Valley where the flow is constrained by the valley walls and south-southwesterly on the plateau, where synoptic-scale pressure gradient forces normally control the direction and speed of the wind.

The katabatic circulation cell continued to exert a large influence on the meteorology of the Piceance Creek Valley during November, althouth the anabatic, or upslope, circulation cell which normally develops during the daylight hours was almost non-existent during the month. The katabatic flow was normally strongest, about 10 miles per hour sustained winds, at Trailer 022 at the eastern end of the monitoring network in the valley. The strongest drainage winds at this station normally occurred from 0100 to 0500 hours in the morning. When northwesterly gradient winds extended down into the valley, they were normally strongest at Trailer 021, at the western end of the valley monitoring network.

Vector resultant winds for the valley stations during the month were: 1.4 miles per hour from 138.6° at Trailer 020, 1.3 miles per hour from 123.2° at Trailer 021 and 3.2 miles per hour from 108.9° at Trailer 022. The highest five-minute average winds recorded during the month in the valley were 19 miles per hour at Trailer 020 on the 18th, 23 miles per hour at Trailer 021 on the 28th, and 18 miles per hour at Trailer 022 on the 27th. The highest daily average winds occurred on November 28th.

Relative humidities were rather uniform in the Piceance Creek Valley during the month. The monthly average relative humidities ranged from 69.9% at Trailer 022 to 62.6% at Trailer 021. Trailer 020 was intermediate with a 66% average relative humidity. The highest daily average relative humidities during the month occurred on November 21st.

Nighttime temperatures once again were coldest at Trailer 021 during November, due to the light winds, dry air, and strong radiational cooling which normally prevailed at this site. The other valley sites also experienced strong radiational cooling conditions, but not to the extent that they developed at Trailer 021. On a clear night with light winds, the air at Trailer 021 was normally 5 degrees colder during the early morning hours than it was at Trailer 020, 10 degrees colder than the air at Trailer 022, and 15 degrees or more colder than the air on the plateau near the meteorological tower. It can therefore be said that nighttime temperatures on clear nights generally increased as one progressed eastward up the Piceance Creek Valley. However, on nights when winds were strong, skies were cloudy, and precipitation fell, the strong radiational cooling did not develop and temperatures were rather uniform throughout the monitoring network, from the valley to the plateau.

Monthly average temperatures in the valley ranged from 26.7° at both Trailers 020 and 021 to 28.9° at Trailer 022. The highest daily average temperatures in the valley during the month occurred on November 22nd, while the lowest daily average temperatures were experienced on November 29th. The highest five-minute maximum temperature in the valley during November was 54°F at Trailer 022 on November 21st. Daytime maximum temperatures in the valley were generally highest at Trailer 022. The lowest temperatures recorded in the valley were -17°F and -16°F, both occurring at Trailer 021, on November 29th and 30th, respectively.

On the plateau, meteorological conditions were often somewhat different from those in the Piceance Creek Valley. The diurnal variations in temperature and wind direction which were so prominent in the valley were not of as much importance on the plateau. The diurnal range of temperatures was much smaller within the Tract C-b itself because of three factors: (1) the plateau was not affected by the katabatic circulation cell to the extent that it affected the valley, (2) radiational cooling conditions were not as strongly developed on the plateau as they were in the valley, and (3) thermally induced vertical mixing of the air during clear or partly cloudy days resulted in rather uniform afternoon temperatures throughout the monitoring network. The fifteen degree differences in temperature which existed during the night were not present during the day. During cloudy, windy, or wet conditions, however, the temperatures were approximately the same at any given time, whether it was a meteorological tower level or a site in the valley.

Winds were generally much stronger on the plateau than they were in the valley. This can be attributed to the fact that the synoptic-scale pressure gradient force winds which affect the plateau seldom extend into the valley because of the terrain constraints. The tower site, in particular, is often affected by very strong winds which are affected only minimally by the terrain and its frictional dissipation forces.

The meteorological tower continued to monitor some remarkable meteorological effects during November. On days with light winds and little, if any, pressure gradient forces, the winds varied considerably in direction with height and the winds were normally strongest at the 100-foot level. On days with strong south-southwesterly winds, the winds increased in speed by about 25% from the 30-foot level to the 200-foot level and generally veered in direction (progression in a clockwise direction) by about 10 degrees from 30-feet to 200-feet. When strong northerly winds prevailed, about a 20% increase in speed from 30-feet to 200-feet occurred and the winds generally backed in direction (counter-clockwise) with increasing height. However, these phenomena are consistent with meteorological rules.

When windy, cloudy, or rain/snow conditions existed, temperatures generally varied little with height at the meteorological tower, a situation which is to be expected because of the neutral stability conditions which prevail under such conditions. However, on clear days or nights when winds were fairly light, the lowest 100 feet of the surface boundary layer on the plateau were often decoupled from the atmosphere above it. That is, the ground-based radiation inversion generated during the night often was confined to the lowest 100 feet, with the temperature decreasing with height above that level. Conversely, during the daytime hours on sunny days, the temperature normally decreased with height up to the 100-foot level. Above that height, however, an inversion layer sometimes existed. On such occasions, therefore, the mixing depth over the meteorological tower site was only 100 feet. This elevated inversion situation was not a common occurrence, but occurred often enough during November to merit some mention.

The average vector resultant wind speed increased with height at the meteorological tower. The resultant speed was 3 miles per hour at 30-feet, 3.4 miles per hour at 100-feet, and 4 miles per hour at 200-feet. The vector resultant wind directions were 202.4 degrees at 30-feet, 189.9 degrees at 100-feet, and 214.0 degrees at 200-feet. For purposes of comparison, Trailer 024, about 1 mile north of the meteorological tower site, had a vector resultant wind direction of 145.5 degrees and a resultant speed of 1.1 miles per hour.

The highest daily average wind speeds on the plateau, up to 18.6 miles per hour at the 200-foot level, were recorded on November 18th, while the lowest daily average wind speeds on the plateau occurred on November 9th. The highest five-minute average wind speeds at the meteorological tower occurred on November 25th.

The monthly average temperatures at the tower site increased with height, ranging from 31.8°F at 8 feet (partially because of radiational cooling effects) to 33.3°F at 200 feet. The 30-foot level averaged 32.4°F and the 100-foot level averaged 33.1°F. The highest daily average temperatures during the month, 41.2°F to 42.6°F, occurred on November 21st. The coldest daily average temperatures on the plateau were recorded on November 29th, with the daily averages ranging from 13.6°F to 15.3°F. The highest five-minute average temperature recorded at the tower site during the month was 53°F at the 8-foot level on the 21st. The lowest temperature recorded on the plateau was 3°F, at both the 8- and 200-foot levels on the 29th.

Relative humidities were fairly uniform over the plateau during the month, averaging in the low 60's at all four tower levels and at Trailer 024. November 3rd and 9th were the most humid days of the month on the plateau, while the 21st was the driest.

Solar radiation measurements showed a direct correlation with cloud cover, atmospheric moisture, turbidity of the air, and solar elevation during November. The highest hourly totals of solar radiation received at the meteorological tower during the month were 49.20 langleys from 1100 to 1200 hours on November 29th and 48.50 langleys from 1000 to 1100 hours on November 5th.

VI. DATA PRESENTATION AND SUMMARY

This section includes summaries for various recorded data at the monitoring sites. The data presentations indicate the variability of pollutant concentrations and meteorological parameters with location and time. In addition, the presentations indicate the functional dependence of pollutant concentration with wind direction. All data except suspended particulates (24-hour samples) are sampled once each second, but recorded as five-minute arithmetic averages of the one-second samples. This averaging technique tends to smooth instantaneous maximum values, and is especially evident when comparing wind gusts to local weather bureau data.

Inherent to any data acquisition system is random noise both from the recording instruments and quantization in the analog-to-digital conversion. The lower threshold for all analytical instruments is twice the maximum noise level generated by the instruments. This lower threshold is 5 ppb for all instruments, except for the ozone analyzer for which it is 0.5 ppb. Therefore, any values appearing in the data presentations that are less than 5 ppb indicate only a trace of pollutant in question and should not be construed to be absolute levels. In addition, when concentration levels drop below the lower threshold, the recorded quantity is simply random noise and averages tend toward zero. Thus, when concentrations are below the lower threshold of the analytical instruments they may appear as a zero entry in the data presentation which does not indicate absolute zero concentration.

All pollutant data (except for particulate data is taken at the monitoring site in integer parts per billion (ppb) but is presented here in micrograms per cubic meter (μg/m^3)

assuming standard temperature and pressure of 25°C and 760 mmHg (1013.2 millibars), respectively. The scale factors required to convert μg/m³ at standard conditions back to ppb for the various pollutants are given in the following table.

POLLUTANT	TO CONVERT μg/m³ AT 25°C AND 760 mmHg TO ppb MULTIPLY BY
NO_x	.534
NO	.534
NO_2	.534
SO_2	.384
H_2S	.723
THC	1.536
CH_4	1.536
CO	.877
O_3	.512

The units of the meteorological parameters are given in the table. It should be noted here that inside temperature is monitored and recorded as a functional part of the system but is not presented in this report.

Table III displays the monthly statistics for each monitoring station for the month. To insure statistical significance, and to reduce the possibility of introducing a bias in the presentation, averages are computed only when at least 50 percent of the samples are present, except for relative humidity and temperature, in which case 75 percent of the samples are required. If less than the required samples are present for a particular parameter, that entry will be blank. The number of samples present for a particular channel is defined as the total possible number of five-minute samples for the averaging time less the computer downtime less the channel downtime less the channel calibration time. The averages in Table III are arithmetic averages with the following exceptions:

- Wind speed and wind direction are computed using a vector averaging technique where the wind speed is treated as the vector magnitude.
- Particulate averages are computed as the geometric mean.

Table IV displays the daily averages. Again, 50 percent of the five-minute samples are required in order to compute an average except for the cases of relative humidity and temperature which require 75 percent. A blank entry indicates an insufficient number of five-minute samples present for that day. Wind speed, wind direction, and particulate averages are computed the same way as described in Table III.

Table V presents the maximum daily five-minute average retained in the data base as well as the time of occurrence. A five-minute maximum average is printed if any samples are present for that day. Therefore, the maximum five-minute average for a channel which experienced considerable downtime or calibration time during the day in question may be misrepresentative of the maximum expected for that channel on that day.

Table VI indicates the five largest averages for various averaging times. The table shows the period of time covered by the average. Maxima are chosen so that time segments are independent. The maximum averages reported are found using a 'sliding average' technique with the exception of the 24-hour particulate average which is computed from midnight to midnight and the 3-hour hydrocarbon average which is computed from 6:00 to 9:00 a.m. only. For averaging times less than or equal to three hours, the sliding average is stepped one five-minute sample at a time. For longer averaging times the step size is twelve samples or one hour. For averaging times less than or equal to one hour 100 percent of the five-minute samples must be present to compute an average. Averaging times greater than one hour require 90 percent. Whether or not a sliding average is computed is solely determined by the number of samples present in that averaging time and is independent of daily and monthly averaging criteria.

To demonstrate the functional dependence of recorded parameters upon wind direction, Table VII shows pollutant concentration displayed in a bi-variate distribution with wind direction. The tables display the total number of five-minute samples occurring in each concentration and wind speed class. The mean concentration for all samples occurring in each wind class are also shown. This distribution demonstrates the dependence of high pollutant concentrations upon wind direction. Appendix A contains stability-wind rose diagrams.

The wind speed classifications used in Appendix A are based on the Beaufort wind scale classification system. This is a system of estimating and reporting wind speeds, invented in the early nineteenth century by Admiral Beaufort of the British Navy. It was originally based on the effects of various wind speeds on the amount of canvas that a full-rigged frigate of the period could carry, but has since been modified and modernized. In its present form for international meteorological use it equates: (a) Beaufort force (or Beaufort number); (b) wind speed;

(c) descriptive term; and (d) visible effects upon land objects or the sea surface. One land adaptation is the NRM wind scale.

The six basic wind speed classifications used in the report are: 1-3 knots, 4-6 knots, 7-10 knots, 11-16 knots, 17-21 knots, and winds of greater than 21 knots. The following table is a complete description of the Beaufort Wind Scale, taken from Physical Climatology, by Helmut Landsberg, 1969.

BEAUFORT WIND SCALE FOR OBSERVATIONS AT LAND STATIONS

Force	Explanatory Title	Specification for Use	Corresponding Limits of Wind Speed at 10 meters ab. grd.				
			Mi/hr.	Knots	Km/hr.	M/sec.	Ft/sec.
0	Calm	Smoke rises vertically	<1	<1	<1	0.3	1
1	Light air	Direction of wind shown by smoke drift, but not by wind vanes	1-3	1-3	1-5	0.3-1.5	1-5
2	Light breeze	Wind felt on face; leaves rustle; ordinary vane moved by wind	4-7	4-6	6-11	1.6-3.3	6-11
3	Gentle breeze	Leaves and small twigs in constant motion; wind extends light flag	8-12	7-10	12-19	3.4-5.4	12-18
4	Moderate breeze	Raises dust and loose paper; small branches are moved	13-18	11-16	20-28	5.5-7.9	19-26
5	Fresh breeze	Small trees in leaf begin to sway; wavelets formed on inland waters	19-24	17-21	29-38	8.0-10.7	27-35
6	Strong breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty	25-31	22-27	39-49	10.8-13.8	36-45
7	High wind	Whole trees in motion; inconvenience felt when walking against wind	32-38	28-33	50-61	13.9-17.1	46-56
8	Fresh gale	Breaks twigs off trees; generally impedes progress	39-46	34-40	62-74	17.2-20.7	57-68
9	Strong gale	Slight structural damage occurs (chimney pots and slates removed)	47-54	41-47	75-88	20.8-24.4	69-80
10	Whole gale	Seldom experienced inland; trees uprooted; considerable structural damage occurs	55-63	48-55	89-102	24.5-28.4	81-93
11	Storm	Very rarely experienced; accompanied by widespread damage	64-72	56-63	103-117	28.5-32.6	94-106
12	Hurricane		73-82	64-71	118-133	32.7-36.9	107-121
13			83-92	72-80	134-149	37.0-41.4	122-136
14			93-102	81-89	150-166	41.5-46.1	137-151
15			101-114	90-99	167-183	46.2-50.9	152-166
16			115-125	100-108	184-201	51.0-56.0	167-183
17			126-136	109-118	202-220	56.1-61.2	184-201

Source: Table 36 (p. 119) in R. J. List (1951); Smithsonian Meteorological Tables; Smithsonian Miscell. Coll. Vol. 114.

Table VIII demonstrates the diurnal variation of various recorded parameters. Hourly averages are determined by arithmetically averaging five-minute samples, except for wind direction magnitudes. Totals in the diurnal wind direction tables are vector averages of the columns and rows. For all parameters, a blank entry in the diurnal variation table indicates that less than half (i.e., less than 6) of the five-minute samples for that hour are present.

It should be noted that the hydrocarbon levels presented do not represent ambient concentrations. The values are influenced by a contamination of the sampling cane. The hydrocarbon levels were significantly reduced after carefully cleaning the sampling cane apparatus.

Times given in the data presentation are Mountain Standard Time.

To facilitate comparison of recorded concentrations to ambient air quality standards, the following regulations are presented.

FEDERAL AND COLORADO STANDARDS

	Primary	Secondary	Non-Designated Area	Designated Area		
				1973	1976	1980
Particulate						
Annual G. M.	75 $\mu g/m^3$	60 $\mu g/m^3$	45 $\mu g/m^3$	70 $\mu g/m^3$	55 $\mu g/m^3$	45 $\mu g/m^3$
24 Hr. Max.*	260	150	150	200	180	150
Sulfur Oxides						
Annual	80(.03ppm)		--	60(.02ppm)	25(.009ppm)	10(.004ppm)
24 Hr. Max.*	365(.14ppm)		15(.005ppm)	300(.1ppm)	150(.05ppm)	55(.02ppm)
3 Hr. Max.*	--	1300(.5ppm)	--	--	--	--
1 Hr. Max.**	--	--	--	800(.28ppm)	300(.1ppm)	--
Oxidant						
1 Hr. Max.*	160(.08ppm)	160				
8 Hr. Max.*	--	--				
Annual	--	--				
Hydrocarbons						
3 Hr. Max.* 6-9 a.m.	160(.24ppm)	160				
Carbon Monoxide						
Max. 8 Hrs.*	10000(9ppm)	10000				
Max. 1 Hr.*	40000(35ppm)	40000				
Nitrogen Dioxide						
Annual	100(.05ppm)	100				

Units are micrograms per cubic meter and ppm in parenthesis.

*Not to be exceeded more than once per year.

**Not to be exceeded more than once per month.

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                 TABLE III. AVERAGES FOR NOV    1 THRU 30
    (UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
          TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

          NITROGEN OXIDES(NOX)                  NITRIC OXIDE(NO)                 NITROGEN DIOXIDE(NO2)

SITE    020       023                     020       023                     020       023
        4.7       6.7                     1.9       4.4                     2.8       2.4
-------------------------------------------------------------------------------------------------------

          TOTAL HYDROCARBONS                      METHANE                  NON-METHANE HYDROCARBONS

SITE    020       023                     020       023                     020       023
      691.1    1034.6                   826.1     149.7                    73.4     933.0
-------------------------------------------------------------------------------------------------------

           CARBON MONOXIDE                         OZONE                    BAROMETRIC PRESSURE

SITE    020       023                     020       023                     020       023
      553.6    3783.0                    58.0
-------------------------------------------------------------------------------------------------------

          SULFUR DIOXIDE(SO2)                                                    PARTICULATE

SITE    020       021       022       023       024                 020       021       022       023       024
        1.4       1.3       2.6       0.0       0.2
-------------------------------------------------------------------------------------------------------

           HYDROGEN SULFIDE                                             TOTAL PRECIPITATION
                                                                              (INCHES)
SITE    020       021       022       023       024                 020       021       022       023       024
        1.0       1.6       0.2       0.0       0.0
-------------------------------------------------------------------------------------------------------

           RELATIVE HUMIDITY                                             TEMPERATURE OUTSIDE

SITE    020       021       022       024                           020       021       022       024
       66.0      62.6      69.9      61.6                          26.7      26.7      28.9
-------------------------------------------------------------------------------------------------------

              WIND SPEED                                                  WIND DIRECTION

SITE .  020       021       022       024                           020       021       022       024
        1.4       1.3       3.2       1.1                         138.6     123.2     108.9     145.5
-------------------------------------------------------------------------------------------------------
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CORPORATION
                    TABLE III, AVERAGES [illegible]R NOV   1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
       TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

                                         WIND SPEED
              (8-FT)           (30-FT)                (100-FT)                (200-FT)
   SITE        023               023                    023                     023
                                 3.0                    3.4                     4.0
--------------------------------------------------------------------------------------

                                         WIND DIRECTION
              (8-FT)           (30-FT)                (100-FT)                (200-FT)
   SITE        023               023                    023                     023
                                 232.4                  189.9                   214.0
--------------------------------------------------------------------------------------

                                         RELATIVE HUMIDITY
              (8-FT)           (30-FT)                (100-FT)                (200-FT)
   SITE        023               023                    023                     023
               63.6              62.8                   61.4                    63.1
--------------------------------------------------------------------------------------

                                         TEMPERATURE OUTSIDE
              (8-FT)           (30-FT)                (100-FT)                (200-FT)
   SITE        023               023                    023                     023
               31.8              32.4                   33.1                    33.3
--------------------------------------------------------------------------------------
```

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE DATE	020	023	020	023	020	023
11/ 1	7.4	0.3	5.3	0.2	2.1	0.1
11/ 2	1.0	0.4	0.2	0.4	0.7	0.0
11/ 3	0.6	0.0	0.2	0.0	0.4	0.0
11/ 4	1.4	0.0	0.3	0.0	0.5	0.0
11/ 5	4.2	0.5	0.4	0.0	4.0	0.5
11/ 6	5.5	0.9	2.3	0.0	3.2	0.9
11/ 7	1.5	0.0	0.0	0.0	1.5	0.0
11/ 8	2.3	0.4	0.0	0.2	2.3	0.0
11/ 9	6.4	0.0	0.0	0.0	6.4	0.0
11/10	28.3	15.0	26.0	15.0	2.3	0.0
11/11	15.4	10.7	11.9	10.7	3.5	0.0
11/12	0.0	23.0	0.0	22.9	0.0	0.1
11/13	0.1	3.5	0.0	3.2	0.1	0.2
11/14	0.0	4.6	0.0	2.0	0.0	2.7
11/15	2.3	2.8	0.0	1.7	2.3	1.1
11/16	0.0	0.5	0.0	0.6	0.0	0.0
11/17	0.2	1.0	0.0	1.0	0.2	0.0
11/18	0.2	2.7	0.0	0.7	0.2	2.0
11/19						
11/20	4.6	1.8	0.0	0.4	4.6	1.5
11/21	1.2	1.8	0.0	0.3	1.2	1.5
11/22	2.3	2.9	0.5	0.9	2.3	1.9
11/23	3.8	5.8	1.9	2.7	1.9	3.1
11/24	3.9	5.7	2.0	1.8	1.9	3.9
11/25	3.4	6.5	1.5	2.8	1.8	3.7
11/26	12.4	10.4	3.7	6.7	8.6	3.7
11/27	12.0	15.9	0.3	5.8	11.7	10.2
11/28	5.0	31.5	0.0	20.1	5.0	11.4
11/29	7.3	30.1	0.3	19.8	7.0	10.2
11/30	6.8	25.4	0.0	14.8	6.8	10.6

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	SULFUR DIOXIDE(SO2)					PARTICULATE				
SITE ATE	020	021	022	023	024	020	021	022	023	024
1/ 1	0.2	3.8	0.0	0.0	1.0		9.0		7.0	
1/ 2	0.0	0.1	0.0	0.0						
1/ 3	0.0	0.0	0.0	0.0						
1/ 4	0.0	0.2	4.6	0.0						
1/ 5	0.0		7.6	0.0	0.0					
1/ 6	0.0	0.4	6.5	0.0	0.0					
1/ 7	0.0	0.0	7.5	0.4	0.0					
1/ 8	0.0	0.0	7.5	0.0	0.0					
1/ 9	0.0		7.7	0.0	0.0					
1/10		0.0	6.7		0.0					
1/11	0.0	0.0	6.3		0.0					
1/12	0.0	0.0	7.5		0.0					
1/13	0.0	1.0	5.7		0.0					
1/14	0.0	0.0	3.4		0.0					
1/15	0.0	0.0	0.3	0.0	0.0					
1/16	0.0	0.0	6.7	0.0	0.1					
1/17	0.0	0.4	6.6	0.0	0.0					
1/18	0.0	0.0	6.0	0.0						
1/19		0.1	0.1	0.0	0.0					
1/20	0.0	0.0	0.0	0.0	0.0					
1/21	0.0	0.0	0.6	0.0	0.0		71.0			
1/22	0.0	0.0	0.0	0.0	0.0		27.0			
1/23	0.0	7.4	0.0	4.3	0.0	7.0	7.0			
1/24	0.0	3.1	0.0	0.0	0.0		6.0	5.0		
1/25	0.7	0.0	0.0	0.0	0.0		11.0	4.0		11.0
1/26	1.0	14.0	0.0	0.0		6.0		10.0		
1/27	0.0	7.6	0.0	0.0	0.0		12.0	17.0	26.0	178.0
1/28	1.1	4.1	0.0	0.0	0.4			154.0		
1/29	0.0		0.0	0.0	1.5	133.0		22.0	21.0	162.0
1/30	0.0	0.0	0.0	0.1	3.2					

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE DATE	020	023	020	023	020	023
11/ 1						
11/ 2						
11/ 3		11555.1		850.8		10704.2
11/ 4		11465.3		861.0		10604.3
11/ 5						
11/ 6						
11/ 7	937.9	9194.7	808.6	953.5	129.3	8241.2
11/ 8	917.3	9625.1	841.4	944.1	75.9	8663.9
11/ 9	924.0	9414.3	859.6	963.1	62.3	8451.2
11/10						
11/11		14587.6		14534.2		53.4
11/12						
11/13						
11/14						
11/15	937.4		876.9		54.0	
11/16	902.5	10259.4	857.5	831.5	44.9	9427.9
11/17	868.5	9330.5	824.8	844.9	43.6	8485.7
11/18	858.4		810.5		47.9	
11/19						
11/20	882.5	8455.7	857.9	842.6	30.6	7613.1
11/21	863.1	10825.3	843.0	798.7	20.1	10026.6
11/22	865.5	16865.6	840.0	684.1	26.5	16181.4
11/23	910.8	18666.2	865.4	724.9	51.5	17941.3
11/24	988.8	17121.0	800.0	711.1	188.8	16409.9
11/25	1007.4		828.7		177.1	
11/26	1022.6	8301.5	867.1	532.8	155.5	7768.7
11/27	941.4	6475.7	851.2	852.5	89.2	5614.2
11/28	891.3	7682.6	837.8	923.7	53.5	6759.1
11/29	764.0	7524.9	748.5		16.1	
11/30	637.9	6839.3	637.9	879.1	0.0	5960.2

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE	
SITE DATE	020	023	020	023	020	023
11/ 1		2787.9	52.0			
11/ 2			65.9	14.2		
11/ 3		1184.3	51.1	10.0		
11/ 4		1848.5		17.2		
11/ 5		3122.0				
11/ 6	952.7	3022.9	50.0			
11/ 7	933.7	2865.4	57.6	33.1		
11/ 8	962.3	2469.3	58.2	32.8		
11/ 9	959.1	3164.0	44.4	25.5		
11/10			22.4			
11/11			38.8			
11/12			67.6			
11/13			52.8			
11/14			56.9			
11/15	447.2		46.6	25.3		
11/16	359.1	9667.5	50.1	27.5		
11/17	344.5	8735.2	60.5	36.8		
11/18	383.1	5342.5	66.2	54.6		
11/19						
11/20		2614.4	35.2	42.5		
11/21	453.9	2696.8	66.6	43.9		
11/22	456.5	2542.4	68.3	38.2		
11/23	461.3	2601.0	64.2	33.9		
11/24	445.4	2740.7	62.6	36.0		
11/25	477.4	1451.9	67.5			
11/26	537.3	2430.0	66.5			
11/27	497.8	2400.4	75.7			
11/28	478.5	3664.6	77.3			
11/29	455.9	3127.4	69.9			
11/30	379.5	3291.9	71.5			

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	HYDROGEN SULFIDE					TOTAL PRECIPITATION (INCHES)				
SITE DATE	020	021	022	023	024	020	021	022	023	024
11/ 1	0.1		1.6	0.4	0.0					
11/ 2	0.3	0.0	1.3	0.4						
11/ 3	[illegible]		1.4	0.0						
11/ 4	[illegible]	2.4	0.5	0.0						
11/ 5	[illegible]		0.4	0.1	0.3					
11/ 6	0.0	2.8	0.4	0.0	0.0					
11/ 7	[illegible]	2.3	0.3	2.4	0.0					
11/ 8	[illegible]	[illegible]	0.0	0.0	0.0					
11/ 9	1.5	0.0	0.0	0.0	0.0					
11/10		0.4	0.0	0.2	0.0					
11/11	0.0	1.4	0.3	0.0	0.0					
11/12	[illegible]	2.3	0.0	0.1	0.0					
11/13	[illegible]	0.4	0.0		0.0					
11/14	[illegible]	3.4	0.0		0.0					
11/15	[illegible]	0.0	0.0	0.0	0.0					
11/16	[illegible]	0.3	0.0	0.0	0.0					
11/17	[illegible]	0.1	0.0	0.0	0.0					
11/18	0.0	12.3	0.2	0.0						
11/19		0.2	0.0	0.0	0.0					
11/20	[illegible]	15.3	0.0	0.0	0.0					
11/21	[illegible]		0.0	3.0	0.0					
11/22	[illegible]		0.0	0.0	0.0					
11/23	[illegible]		0.0	0.0	0.0					
11/24	0.0	0.0	0.0	0.0	0.0					
11/25	0.0	0.0	0.0	0.0	0.0					
11/26	[illegible]	4.0	0.1	0.0	0.0					
11/27	[illegible]	0.0	0.0	0.0	0.0					
11/28	[illegible]	0.0	0.0	0.0	0.0					
11/29	[illegible]		0.0	0.0	0.0					
11/30	[illegible]	[illegible]	0.7	0.0	0.0					

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MILLIGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	RELATIVE HUMIDITY				TEMPERATURE OUTSIDE			
SITE DATE	020	021	022	024	020	021	022	024
11/ 1	79.5	75.3	64.1		34.3	34.9	36.7	
11/ 2	77.3	72.2			33.3	33.3		
11/ 3	91.[illegible]	63.2		98.3	27.8	29.0		
11/ 4	78.3	70.5	80.5	76.1	27.4	27.7	29.9	
11/ 5	74.7	67.2	75.6	70.2	23.1	22.4	26.2	
11/ 6	68.[illegible]		72.7	64.4	23.5		27.0	
11/ 7	64.6	53.2	60.3	55.5	27.0	25.8	29.3	
11/ 8	63.1	63.0	71.1	58.8	31.2	30.0	29.5	
11/ 9	95.[illegible]	80.3	97.[illegible]	97.1	28.9	30.0	30.9	
11/10	76.1	67.2	85.9	79.8	26.5	29.3	30.6	
11/11	64.2	59.5	67.2	56.4	24.3	24.1	27.2	
11/12	52.6	51.7	59.1	47.7	31.4	31.7	32.6	
11/13	53.9	55.9	62.7	49.4	33.6	33.9	35.8	
11/14	63.3	59.5	66.6	57.9	31.5	30.7	33.3	
11/15	71.[illegible]	64.5	64.3	52.9	29.2	32.0	35.0	
11/16	63.1	58.3	65.1	52.1	27.1	25.0	29.6	
11/17	52.3	51.8	57.6		30.9	28.7	32.5	
11/18	61.2	53.8	65.4		35.0	35.8	36.8	
11/19		65.7	74.9	66.0		25.1	27.1	
11/20	49.6	47.8	54.1	43.6	26.9	27.3	28.3	
11/21	38.9	43.6	44.4	29.9	34.1	31.1	35.1	
11/22	51.5	55.1	55.4	48.1	36.9	32.4	38.7	
11/23	53.3	74.8	67.0	61.2	20.5	20.4	22.1	
11/24	69.2	66.9	75.8	60.3	21.0	20.2	22.2	
11/25	53.0		61.5	42.4	29.0		29.7	
11/26	55.[illegible]	62.[illegible]	60.7	52.4	20.1	20.4	22.3	
11/27	42.[illegible]	51.2	53.3	4[illegible].3	24.5	23.9	26.2	
11/28	74.5	60.4	79.5	78.1	18.9	21.2	20.9	
11/29	68.[illegible]		72.[illegible]	66.4	2.4		11.3	
11/30	61.2	62.4	61.[illegible]	5[illegible].1	10.7	6.7	15.1	

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SITE	WIND SPEED				WIND DIRECTION			
DATE	020	021	022	024	020	021	022	024
11/ 1	1.2	2.7	3.4		148.2	128.4	117.6	
11/ 2	2.5	2.0	0.9		322.1	340.8	58.0	
11/ 3	2.2	3.2	2.7		251.4	328.9	272.0	
11/ 4	4.1	2.0	0.5		290.8	120.1	285.0	
11/ 5	0.1	0.7	2.1	0.3	175.5	342.3	103.9	111.1
11/ 6	3.3	2.3	1.6	1.4	151.2	148.2	105.9	150.7
11/ 7	2.6	2.4	5.6	3.1	138.5	160.0	113.4	141.6
11/ 8	2.8	1.2	3.5	1.7	141.0	153.1	107.2	158.0
11/ 9	0.2	1.5	0.5	0.0	121.1	125.4	141.4	224.9
11/10	[illegible]	0.2	0.5	0.6	140.2	129.9	110.2	223.5
11/11	3.4	1.1	2.0	0.4	122.9	102.2	101.8	66.5
11/12	4.2	6.0	6.2	2.7	123.7	124.0	104.9	127.8
11/13	0.5	1.8	2.0	1.6	67.9	83.4	83.8	312.3
11/14	1.4	2.4	3.1	1.4	123.7	124.2	98.7	124.7
11/15	3.3	1.0	3.2	0.3	139.0	118.5	107.7	70.8
11/16	1.4	0.9	5.2	0.9	125.2	147.2	105.7	107.6
11/17	2.9	2.5	6.1	2.1	142.4	137.8	114.5	106.3
11/18	1.6	4.0	1.4		179.7	147.4	128.8	
11/19		1.5	1.2	0.4		135.5	108.0	215.6
11/20	5.8	4.9	7.1	2.8	132.9	128.4	111.4	117.8
11/21	4.1	2.9	7.0	3.8	135.6	151.8	108.3	129.8
11/22	1.5	1.3	2.5	4.0	185.4	178.1	127.1	168.7
11/23	0.9	0.2	0.8	0.8	132.2	160.5	89.1	92.7
11/24	2.9	2.5	5.6	2.0	126.3	117.9	106.4	99.3
11/25	4.2	4.9	5.2	4.2	142.6	119.3	99.6	161.6
11/26	1.8	1.8	5.3	0.1	127.6	142.2	109.2	101.3
11/27	4.2	2.5	5.8	2.0	134.3	138.6	113.1	130.6
11/28	3.5	0.4	4.1	5.7	303.2	338.3	280.1	275.6
11/29	1.4		4.3	0.9	129.1		105.0	74.8
11/30	2.1	1.1	7.7	2.8	124.3	125.2	108.9	99.9

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED			
	(5-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
ATE				
/ 1		6.4	7.8	8.3
/ 2		1.8	1.7	1.7
/ 3		6.6	7.5	6.3
/ 4		1.6	1.6	1.7
/ 5		1.7	1.9	1.6
/ 6		3.4	3.4	3.4
/ 7		6.3	7.3	7.4
/ 8		4.9	5.6	5.3
/ 9		1.8	0.8	0.7
/10		2.3	1.1	1.3
/11		0.6	1.4	1.4
/12		6.9	9.4	11.8
/13		2.3	3.0	4.1
/14		4.7	6.7	7.4
/15		1.2	1.3	1.9
/16	0.7	1.5	1.7	1.5
/17	3.5	5.1	6.8	8.0
/18	10.5	13.9	16.6	18.6
/19	1.2	1.7	2.2	2.8
/20	3.6	6.2	8.1	9.1
/21	0.7	8.0	9.8	10.6
/22		8.0	9.6	10.2
/23	1.0	1.9	2.6	2.8
/24	1.3	2.8	3.8	3.4
/25	5.3	7.4	9.3	10.7
/26	1.2	2.1	2.4	3.3
/27	2.9	4.2	4.8	5.1
/28	6.3	8.6	10.2	10.5
/29	0.6	0.9	0.7	0.9
/30	1.6	2.4	2.4	2.4

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND DIRECTION			
SITE E	(6-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
1		185.2	175.7	196.8
2		333.1	338.1	345.6
3		293.5	288.7	302.2
4		252.6	264.8	294.6
5		263.3	306.2	332.5
6		210.3	201.6	219.5
7		173.2	160.9	185.4
8		184.9	163.4	181.1
9		217.1	232.1	320.0
/10		208.6	215.7	258.6
/11		143.4	131.3	171.3
/12		181.7	179.5	203.1
/13		296.2	290.3	296.4
/14		190.1	180.2	201.1
/15		193.1	190.8	230.5
/16	152.3	153.6	138.1	167.0
/17	195.2	175.7	170.2	198.3
/18	210.7	206.0	197.1	217.4
/19	312.3	269.1	197.3	265.5
/20	167.3	164.4	152.8	177.9
/21	153.5	170.2	160.5	182.3
/22		199.6	186.4	203.9
/23	207.5	329.0	316.5	327.7
/24	171.6	171.5	166.7	198.3
/25	182.3	191.4	182.1	207.2
/26	247.3	235.1	246.0	262.6
/27	175.4	170.8	158.8	187.0
/28	315.7	315.1	312.4	323.2
/29	252.7	232.5	277.0	293.2
/30	155.1	165.9	160.0	180.1

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

RELATIVE HUMIDITY

SITE TE	(3-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
/ 1	81.1	81.9	84.4	87.7
/ 2	82.1	84.0	84.8	85.8
/ 3	95.3	99.7	99.5	100.0
/ 4	83.0	83.8	82.1	82.0
/ 5	74.7	71.5	71.2	75.9
/ 6	59.2	65.1	63.4	65.2
/ 7	56.5	56.0	54.4	57.0
/ 8	59.3	57.1	55.3	56.4
/ 9	95.3	96.6	96.2	99.3
/10	64.5	65.0	84.8	82.4
/11	52.3	59.0	56.1	57.9
/12	51.6	49.4	47.2	49.9
/13	52.5	49.3	48.4	51.0
/14	55.0	53.9	51.9	54.6
/15	53.2	52.2	50.9	52.3
/16	50.9	49.0	47.6	49.9
/17	44.3	43.7	42.4	44.4
/18	57.3	59.7	62.3	63.1
/19	70.2	69.7	66.8	69.0
/20	44.1	43.1	41.3	43.3
/21	33.3	34.1	33.7	35.7
/22	51.8	52.3	52.5	53.5
/23	83.4	85.9	80.7	77.5
/24	52.0	59.9	53.2	53.3
/25	46.0	45.0	43.1	44.7
/26	49.7	50.5	48.1	50.2
/27	39.5	39.4	37.4	38.9
/28	83.2	83.1	82.9	84.6
/29	71.5	66.5	66.4	70.9
/30				

TABLE IV. DAILY AVERAGES FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
SITE	(6-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
TE				
/ 1	35.9	34.8	35.2	35.3
/ 2	34.8	34.3	34.8	35.3
/ 3	28.6	28.6	27.9	28.0
/ 4	29.3	29.4	29.5	30.1
/ 5	28.4	29.7	30.1	29.6
/ 6	29.1	30.2	30.9	31.2
/ 7	34.2	34.5	35.5	35.3
/ 8	36.7	37.2	38.6	38.9
/ 9	31.0	30.9	31.6	31.5
/10	30.5	30.2	30.4	31.5
1/11	29.5	30.6	31.7	32.1
1/12	30.1	36.3	37.1	37.0
1/13	39.2	39.6	40.8	40.1
1/14	36.8	37.4	38.9	38.7
1/15	37.4	37.7	39.4	39.1
1/16	34.2	35.3	36.8	36.9
1/17	37.3	37.3	38.9	38.7
1/18	37.6	37.4	37.2	36.9
1/19	28.1	28.8	29.6	30.0
1/20	33.5	34.0	35.0	35.3
1/21	41.2	41.3	42.6	42.4
1/22	36.5	40.5	41.3	41.4
1/23	25.0	25.7	26.2	27.3
1/24	28.5	29.9	31.2	32.0
1/25	34.3	35.4	35.9	35.9
1/26	27.4	28.9	29.8	29.5
1/27	31.2	31.7	32.5	32.5
1/28	22.1	22.7	21.7	22.2
11/29	13.6	15.3	15.5	15.7
11/30		22.4	22.5	23.6

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE	020	023	020	023	020	023
DATE						
11/ 1	58.0(12:45)	3.7(0:20)	58.0(12:45)	3.7(17:25)	20.6(11:25)	3.7(0:20)
11/ 2	5.6(2:35)	5.6(12:20)	3.7(1:25)	5.6(12:20)	5.6(6:45)	1.9(16:15)
11/ 3	3.7(1:35)	1.9(19:10)	3.7(10:15)	0.0(0:00)	3.7(1:35)	1.9(19:10)
11/ 4	5.6(17:15)	3.7(9:35)	3.7(8:40)	0.0(0:00)	3.7(8:00)	3.7(9:35)
11/ 5	15.0(20:10)	9.4(23:35)	7.5(22:40)	0.0(0:00)	15.0(20:10)	9.4(23:35)
11/ 6	18.7(5:40)	7.5(3:15)	11.2(8:20)	1.9(3:30)	15.0(4:40)	7.5(3:15)
11/ 7	9.4(18:30)	5.6(11:50)	1.9(6:25)	0.0(0:00)	9.4(18:30)	5.6(11:50)
11/ 8	15.0(20:25)	0.0(0:00)	0.0(0:00)	0.0(0:00)	15.0(20:25)	0.0(0:00)
11/ 9	20.6(23:55)	1.9(5:25)	1.9(2:40)	0.0(0:00)	20.6(23:55)	1.9(5:25)
11/10	67.4(7:55)	46.8(12:20)	52.4(6:45)	43.1(10:25)	22.5(5:25)	9.4(12:20)
11/11	61.8(2:35)	37.4(2:15)	58.0(2:45)	37.4(2:15)	33.7(4:05)	1.9(8:10)
11/12	1.9(1:50)	56.2(0:35)	0.0(0:00)	56.2(0:35)	1.9(1:50)	16.9(21:05)
11/13	3.7(20:15)	43.1(2:50)	0.0(0:00)	43.1(2:50)	3.7(20:15)	11.2(19:45)
11/14	0.0(0:00)	33.7(8:45)	0.0(0:00)	20.6(8:05)	0.0(0:00)	16.9(9:40)
11/15	15.0(6:55)	18.7(0:55)	0.0(0:00)	15.0(0:55)	15.0(6:55)	7.5(0:35)
11/16	3.7(17:45)	7.5(8:40)	0.0(0:00)	7.5(8:40)	3.7(17:45)	0.0(0:10)
11/17	9.4(18:05)	30.4(12:25)	0.0(0:00)	30.4(12:25)	9.4(18:05)	0.0(0:10)
11/18	3.7(17:15)	20.6(22:05)	0.0(0:00)	15.0(20:35)	3.7(17:15)	11.2(21:25)
11/19	3.7(18:25)	20.6(0:40)	0.0(14:05)	13.1(0:40)	3.7(18:25)	11.2(0:00)
11/20	16.9(4:30)	15.0(3:45)	1.9(8:15)	7.5(3:45)	16.9(4:30)	9.4(10:30)
11/21	9.4(17:50)	16.9(6:55)	3.7(23:05)	9.4(6:55)	9.4(17:50)	11.2(22:40)
11/22	9.4(4:50)	18.7(23:55)	5.6(21:20)	11.2(19:55)	9.4(4:50)	13.1(7:50)
11/23	9.4(8:50)	24.3(21:25)	9.4(8:50)	16.9(11:15)	7.5(8:25)	15.0(12:40)
11/24	11.2(4:20)	24.3(1:35)	9.4(7:00)	15.0(2:45)	9.4(4:20)	13.1(12:15)
11/25	22.5(23:45)	39.3(18:20)	11.2(22:45)	28.1(21:45)	22.5(23:45)	26.2(18:00)
11/26	31.8(22:00)	43.7(16:25)	15.0(6:30)	37.4(7:30)	31.8(22:00)	43.1(16:25)
11/27	30.0(4:45)	67.4(22:10)	7.5(2:10)	39.3(21:50)	28.1(4:00)	35.6(0:55)
11/28	15.0(3:00)	93.2(9:20)	0.0(0:00)	82.4(9:05)	15.0(3:00)	41.2(11:50)
11/29	16.9(2:50)	112.3(7:15)	5.6(5:30)	89.0(7:15)	16.9(2:50)	35.6(16:10)
11/30	18.7(7:00)	67.4(7:15)	5.6(10:30)	63.7(1:10)	18.7(7:00)	39.3(7:55)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SULFUR DIOXIDE(SO2)

SITE	020	021	022	023	024
11/ 1	5.2(14:10)	33.9(0:45)	5.2(4:00)	2.6(12:15)	2.6(0:00)
11/ 2	0.0(0:00)	18.2(10:45)	2.6(10:35)	0.0(0:05)	0.0(12:25)
11/ 3	0.0(0:00)	0.0(0:00)	0.0(9:10)	0.0(0:00)	0.0(0:00)
11/ 4	0.0(0:05)	0.0(0:00)	10.4(11:20)	0.0(0:00)	0.0(17:00)
11/ 5	0.0(0:20)	0.0(15:15)	10.4(0:00)	0.0(0:00)	0.0(0:00)
11/ 6	0.0(0:30)	0.0(11:30)	31.3(17:05)	0.0(0:00)	2.6(3:35)
11/ 7	0.0(0:00)	0.0(0:40)	13.0(23:30)	0.0(0:00)	0.0(0:00)
11/ 8	0.0(0:00)	0.0(0:00)	10.4(0:25)	0.0(0:00)	0.0(0:00)
11/ 9	2.6(15:25)	0.0(0:00)	10.4(3:55)	0.0(0:00)	0.0(0:00)
11/10		0.0(12:00)	13.0(6:45)		0.0(0:00)
11/11	0.0(4:00)	0.0(0:05)	10.4(3:40)		0.0(0:00)
11/12	0.0(0:00)	0.0(0:00)	10.4(2:05)		0.0(0:00)
11/13	0.0(0:00)	0.0(0:00)	7.8(7:05)		2.6(18:25)
11/14	0.0(0:00)	0.0(0:00)	10.4(7:00)	0.0(14:00)	0.0(0:00)
11/15	0.0(0:00)	0.0(0:00)	5.2(2:00)	0.0(0:15)	0.0(0:00)
11/16	0.0(0:00)	2.6(11:25)	5.2(11:10)	0.0(0:10)	15.6(12:30)
11/17	0.0(0:00)	0.0(0:00)	5.2(3:05)	0.0(0:10)	0.0(0:00)
11/18	0.0(0:00)	0.0(0:05)	2.6(0:00)	0.0(0:05)	0.0(12:30)
11/19	0.0(14:35)	2.6(13:55)	2.6(0:00)	0.0(0:00)	0.0(0:00)
11/20	0.0(0:30)	2.6(1:15)	0.0(0:00)	0.0(0:05)	0.0(0:00)
11/21	0.0(0:00)	0.0(0:50)	0.0(0:00)	0.0(0:05)	0.0(0:00)
11/22	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:05)	0.0(0:00)
11/23	0.0(0:00)	5.2(1:50)	0.0(0:00)	0.0(0:00)	0.0(0:00)
11/24	0.0(0:00)	7.8(11:30)	0.0(0:00)	0.0(0:00)	0.0(0:00)
11/25	0.0(0:00)	0.0(0:05)	0.0(0:00)	0.0(0:00)	0.0(0:00)
11/26	0.0(0:00)	33.9(3:05)	0.0(0:00)	0.0(0:00)	0.0(16:15)
11/27	0.0(0:00)	31.3(3:15)	0.0(0:00)	0.0(0:00)	0.0(0:00)
11/28	0.0(0:00)	31.3(12:15)	0.0(0:00)	0.0(0:00)	0.0(0:00)
11/29	0.0(0:00)	2.6(0:10)	2.6(14:50)	0.0(0:00)	5.2(20:05)
11/30	0.0(0:40)	5.2(11:40)	0.0(0:00)	0.0(0:00)	5.2(0:25)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE DATE	020	023	020	023	020	023
11/ 1	944.9(2:20)		917.6(2:20)		69.7(2:55)	
11/ 2		20188.1(18:10)		866.1(23:40)		19380.6(22:00)
11/ 3		20188.1(0:25)		885.7(5:45)		19380.6(1:15)
11/ 4	1[illegible].9(12:20)	20188.1(0:00)	131.5(12:25)	924.7(9:40)	919.5(12:20)	19361.1(0:20)
11/ 5	955.1(19:3[illegible])		881.1(18:34)		165.4(15:00)	
11/ 6	972.9(6:55)	20188.1(18:55)	917.6(6:55)	983.4(15:10)	59.3(18:00)	19263.4(18:55)
11/ 7	1124.2(15:30)	20188.1(1:45)	903.3(0:55)	1133.1(11:55)	302.2(15:30)	19263.4(18:35)
11/ 8	992.5(15:10)	20188.1(2:20)	974.9(20:05)	1028.9(3:45)	145.9(0:50)	19282.9(13:25)
11/ 9	1157.[illegible](7:[illegible])	20188.1(11:10)	1129.2(6:55)	1068.0(11:20)	696.8(14:20)	19282.9(20:30)
11/10		20188.1(0:00)		983.4(0:45)		19282.9(0:20)
11/11		14652.7(15:55)		14594.1(19:15)		664.3(9:05)
11/12		14633.1(13:15)		14594.1(13:15)		104.2(14:35)
11/13						
11/14	1340.9(13:30)		1340.9(13:30)		243.6(22:50)	
11/15	1640.6(23:[illegible])	20188.1(14:20)	1094.1(22:45)	846.6(12:40)	768.5(23:00)	19406.7(16:00)
11/16	1024.4([illegible]:45)	20188.1(4:20)	1004.8(0:40)	963.8(16:40)	98.3(15:35)	19380.6(5:15)
11/17	2279.3(1[illegible]:25)	20188.1(7:25)	931.9(18:10)	983.4(22:00)	1493.9(10:25)	19361.1(1:55)
11/18	1111.9(20:15)	20188.1(17:15)	941.7(20:20)	892.2(18:55)	275.1(20:15)	19322.0(17:15)
11/19	1666.9(23:[illegible])	20188.1(15:05)	1116.2(22:35)	905.2(17:10)	767.8(23:00)	19361.1(16:40)
11/20	1071.3(17:40)	20188.1(0:05)	917.6(1:00)	905.2(6:05)	185.6(17:40)	19406.7(19:40)
11/21	957.1(23:[illegible])	40376.3(16:55)	967.1(23:00)	1204.8(16:55)	76.2(16:10)	39692.5(20:55)
11/22	1043.5(5:30)	40376.3(4:15)	1021.1(5:30)	761.9(3:50)	95.7(21:40)	39816.2(6:45)
11/23	1[illegible].1(5:40)	40376.3(4:15)	1047.6(8:15)	846.6(12:45)	170.0(5:40)	39770.6(1:15)
11/24	1754.4(10:50)	40376.3(0:05)	941.7(5:45)	807.5(1:45)	937.1(10:50)	39770.6(4:40)
11/25	1197.6(21:15)		1081.7(22:00)		313.9(11:10)	
11/26	1479.3(12:45)	20188.1(1:15)	1246.4(20:55)	1172.2(16:40)	629.7(12:45)	19849.5(3:25)
11/27	1044.1(22:40)	20188.1(9:35)	1010.1(22:45)	1068.0(16:20)	146.5(3:05)	19374.1(10:10)
11/28	1118.[illegible](7:35)	20188.1(5:55)	911.7(23:50)	983.4(2:15)	257.2(7:35)	19276.4(21:35)
11/29	1037.4(4:25)	20188.1(2:00)	983.4(4:30)		684.4(10:15)	
11/30	782.8(7:45)	20188.1(0:20)	782.8(7:45)	924.7(9:25)	0.0(0:00)	19322.0(2:05)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

HYDROGEN SULFIDE

SITE	020	021	022	023	024
1/ 1	0.0(0:00)	0.0(0:00)	4.2(4:50)	0.0(0:00)	0.0(0:00)
1/ 2	0.0(0:00)	0.0(0:00)	2.8(1:25)	0.0(0:05)	0.0(12:25)
1/ 3	0.0(0:00)	0.0(0:00)	2.8(9:25)	0.0(0:00)	0.0(0:00)
1/ 4	0.0(0:35)	0.0(0:00)	4.2(1:15)	0.0(0:00)	0.0(17:00)
1/ 5	0.0(0:00)		0.0(0:00)	36.0(23:45)	12.5(16:20)
1/ 6	0.0(0:00)	2.8(16:05)	0.0(0:00)	0.0(0:00)	0.0(0:00)
1/ 7	0.0(0:00)	2.8(0:05)	0.0(0:00)	0.0(0:00)	0.0(0:00)
1/ 8	0.0(0:00)	1.4(3:05)	0.0(0:00)	0.0(0:00)	0.0(0:00)
1/ 9	12.5(20:15)	1.4(4:55)	0.0(0:05)	0.0(0:00)	0.0(0:00)
1/10	6.9(3:55)	1.4(2:05)	0.0(0:05)	4.2(11:35)	0.0(0:00)
1/11	0.0(11:35)	2.8(15:05)	0.0(0:05)	1.4(1:25)	0.0(0:00)
1/12	0.0(0:00)	4.2(0:00)	0.0(0:00)	35.7(6:40)	0.0(0:00)
1/13	0.0(0:00)	4.2(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:00)
1/14	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(14:00)	0.0(0:00)
1/15	0.0(0:00)	16.8(0:25)	0.0(0:00)	0.0(0:00)	0.0(0:00)
1/16	0.0(7:00)	0.0(0:00)	0.0(0:00)	0.0(0:10)	0.0(0:00)
1/17	0.0(0:00)	42.8(0:10)	0.0(0:00)	0.0(0:10)	0.0(0:00)
1/18	0.0(0:40)	107.9(10:05)	56.7(10:35)	0.0(0:05)	0.0(12:30)
1/19	0.0(14:05)	42.9(9:05)	1.4(9:30)	2.8(10:25)	0.0(0:00)
1/20	0.0(0:20)	87.2(22:05)	1.4(1:20)	0.0(0:05)	0.0(0:00)
1/21	1.4(0:00)		1.4(14:05)	0.0(4:05)	0.0(0:00)
1/22	0.0(7:00)		1.4(16:30)	0.0(0:05)	0.0(0:00)
1/23	0.0(0:00)		0.0(0:00)	0.0(0:00)	0.0(0:00)
1/24	0.0(0:00)	0.0(12:00)	1.4(0:25)	0.0(0:00)	0.0(0:00)
1/25	0.0(0:00)	0.0(4:05)	1.4(2:40)	0.0(0:00)	0.0(0:00)
1/26	0.0(0:40)	0.0(0:00)	2.8(15:10)	4.2(18:15)	0.0(0:00)
1/27	0.0(2:00)	0.0(0:00)	1.4(2:35)	0.0(0:00)	0.0(0:00)
1/28	0.0(0:00)	0.0(11:20)	1.4(3:45)	0.0(0:00)	0.0(0:00)
1/29	0.0(0:00)	0.0(0:00)	1.4(0:25)	0.0(0:00)	11.1(12:40)
1/30	0.0(0:00)	0.0(0:00)	2.8(5:10)	0.0(0:00)	0.0(0:00)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE	
SITE DATE	020	023	020	023	020	023
11/ 1	846.5(1:30)	3801.9(7:55)	109.4(15:40)	33.2(17:05)		
11/ 2		1061.8(22:10)	111.4(12:40)	27.4(12:35)		
11/ 3		1035.4(23:25)	66.4(16:44)	19.5(18:40)		
11/ 4	217.6(12:20)	27078.1(19:10)	95.7(12:25)	27.4(11:35)		
11/ 5	984.7(15:55)	15530.0(16:00)	89.9(14:30)			
11/ 6	1113.4(15:55)	4282.6(12:15)	95.7(14:40)	46.9(15:30)		
11/ 7	1137.5(15:35)	4457.4(7:05)	101.6(11:40)	62.5(12:55)		
11/ 8	1034.6(23:45)	4132.4(22:45)	99.6(11:05)	64.5(10:50)		
11/ 9	1067.9(13:50)	4489.1(10:10)	89.9(14:30)	43.0(14:20)		
11/10		4075.5(0:05)	48.8(1:55)	27.4(0:35)		
11/11			89.9(11:40)			
11/12			91.8(12:20)			
11/13			115.3(3:25)			
11/14	2739.7(13:30)	14314.3(15:30)	93.8(13:00)	58.6(14:25)		
11/15	523.1(17:10)	13859.3(1:20)	89.9(13:50)	50.8(0:05)		
11/16	428.5(0:05)	10610.2(1:15)	91.8(13:40)	46.9(11:25)		
11/17	5158.3(17:05)	9437.5(1:10)	89.9(10:55)	66.4(15:35)		
11/18	2765.9([illegible])	9101.3(2:30)	86.0(14:15)	76.2(13:25)		
11/19	523.1(18:40)	4029.7(23:25)	89.9(15:40)	50.6(16:30)		
11/20	599.3(17:50)	5472.6(6:05)	86.0(15:55)	70.3(15:30)		
11/21	517.7(15:45)	5564.0(10:55)	95.7(11:10)	76.2(11:05)		
11/22	651.9(15:20)	3865.5(23:05)	95.7(15:25)	72.3(15:30)		
11/23	[illegible]	4244.1(10:45)	91.8(14:25)	52.7(14:10)		
11/24	463.9(8:15)	4579.1(8:10)	95.7(12:25)	62.5(11:55)		
11/25	943.6(17:15)	27390.4(22:20)	95.7(15:05)	75.2(16:00)		
11/26	555.9(21:20)	5123.4(22:10)	107.5(13:45)	43.8(16:15)		
11/27	923.6(16:15)	4557.7([illegible])	113.3(11:05)	84.2(15:00)		
11/28	520.5(23:45)	4352.1(9:10)	95.7(17:00)			
11/29	737.4(23:40)	4144.5(23:40)	103.5(13:10)			
11/30	723.4(5:25)	4350.1(12:10)	117.2(19:50)			

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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV   1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)


                                          TOTAL PRECIPITATION
                                               (INCHES)
   SITE          020            021            022            023            024
----------------------------------------------------------------------------------------
11/ 1
11/ 2
11/ 3
11/ 4
11/ 5
11/ 6
11/ 7
11/ 8
11/ 9
11/10
----------------------------------------------------------------------------------------
11/11
11/12
11/13
11/14
11/15
11/16
11/17
11/18
11/19
11/20
----------------------------------------------------------------------------------------
11/21
11/22
11/23
11/24
11/25
11/26
11/27
11/28
11/29
11/30
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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

TEMPERATURE OUTSIDE

SITE	020	021	022	024
11/ 1	42.0(13:25)	42.0(13:30)	46.0(14:45)	
11/ 2	43.0(15:25)	42.0(10:55)	45.0(14:35)	
11/ 3	31.0(11:30)	31.0(3:00)	34.0(11:10)	
11/ 4	36.0(14:20)	37.0(16:55)	40.0(15:10)	
11/ 5	41.0(14:50)	42.0(13:50)	42.0(13:45)	
11/ 6	42.0(14:40)	42.0(12:40)	45.0(13:40)	
11/ 7	45.0(13:40)	48.0(13:30)	48.0(13:30)	
11/ 8	49.0(12:10)	49.0(13:20)	49.0(15:05)	
11/ 9	36.0(13:55)	37.0(11:50)	38.0(13:50)	
11/10	37.0(15:45)	37.0(12:55)	39.0(13:25)	
11/11	41.0(14:45)	42.0(13:15)	43.0(14:25)	
11/12	40.0(12:15)	47.0(12:45)	47.0(12:35)	
11/13	49.0(11:55)	52.0(12:05)	50.0(11:25)	
11/14	47.0(12:35)	52.0(13:30)	51.0(12:20)	
11/15	46.0(13:25)	49.0(15:15)	50.0(13:55)	
11/16	48.0(15:30)	47.0(13:25)	49.0(14:35)	
11/17	46.0(12:15)	49.0(14:50)	50.0(12:30)	
11/18	42.0(9:15)	42.0(9:10)	44.0(9:15)	
11/19	36.0(14:50)	37.0(13:45)	38.0(14:55)	
11/20	45.0(13:40)	47.0(12:50)	48.0(12:20)	
11/21	51.0(12:20)	53.0(14:35)	54.0(12:40)	
11/22	52.0(12:10)	52.0(11:40)	51.0(12:25)	
11/23	31.0(15:40)	31.0(13:10)	31.0(13:40)	
11/24	41.0(14:25)	42.0(13:55)	41.0(12:40)	
11/25	46.0(13:15)	47.0(12:20)	48.0(13:05)	
11/26	38.0(14:55)	41.0(14:20)	40.0(14:25)	
11/27	42.0(12:55)	42.0(11:15)	45.0(13:25)	
11/28	23.0(14:35)	34.0(14:00)	38.0(1:00)	
11/29	25.0(15:15)	16.0(14:20)	26.0(14:15)	
11/30	35.0(14:50)	37.0(13:40)	35.0(13:40)	

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

WIND SPEED - WIND DIRECTION

SITE	020		021		022		024	
11/ 1	9.0	148.0(16:10)	10.0	333.0(12:35)	12.0	112.0(15:05)		
11/ 2	5.0	4.0(16:05)	10.0	343.0(15:40)	9.0	289.0(14:25)		
11/ 3	6.0	234.0(15:50)	10.0	305.0(16:00)	10.0	268.0(16:05)		
11/ 4	4.0	39.0(14:10)	3.0	335.0(17:05)	10.0	273.0(15:20)	3.0	84.0(22:05)
11/ 5	5.0	283.0(15:15)	7.0	334.0(15:25)	7.0	109.0(1:25)	7.0	281.0(13:45)
11/ 6	5.0	273.0(14:25)	9.0	270.0(14:15)	9.0	95.0(0:40)	9.0	178.0(13:35)
11/ 7	9.0	120.0(5:55)	11.0	162.0(15:15)	12.0	115.0(5:50)	10.0	172.0(11:55)
11/ 8	13.0	303.0(15:05)	15.0	307.0(15:05)	14.0	110.0(0:30)	15.0	273.0(15:15)
11/ 9	5.0	347.0(14:25)	10.0	42.0(14:30)	8.0	254.0(14:40)	6.0	321.0(14:45)
11/10	7.0	281.0(15:40)	7.0	251.0(15:15)	8.0	134.0(9:55)	10.0	232.0(15:10)
11/11	6.0	281.0(12:50)	6.0	117.0(22:25)	11.0	110.0(23:25)	7.0	285.0(13:00)
11/12	11.0	132.0(5:30)	11.0	138.0(18:25)	11.0	109.0(0:20)	12.0	174.0(15:55)
11/13	15.0	296.0(12:05)	19.0	331.0(12:05)	15.0	275.0(11:30)	20.0	288.0(12:15)
11/14	6.0	132.0(7:45)	10.0	139.0(22:20)	11.0	101.0(8:45)	10.0	175.0(15:40)
11/15	8.0	291.0(16:10)	10.0	122.0(11:05)	10.0	120.0(4:50)	12.0	260.0(16:05)
11/16	7.0	129.0(23:10)	5.0	118.0(17:10)	14.0	116.0(21:45)	7.0	159.0(17:50)
11/17	11.0	129.0(5:30)	10.0	105.0(19:55)	14.0	111.0(4:00)	9.0	231.0(12:00)
11/18	10.0	255.0(10:20)	13.0	164.0(11:40)	16.0	277.0(19:25)	24.0	233.0(19:20)
11/19	4.0	135.0(22:50)	7.0	114.0(19:55)	9.0	96.0(21:35)	7.0	276.0(15:35)
11/20	11.0	131.0(4:15)	12.0	155.0(15:25)	13.0	113.0(7:30)	10.0	178.0(13:50)
11/21	13.0	124.0(4:45)	12.0	158.0(14:20)	16.0	101.0(0:55)	15.0	185.0(13:10)
11/22	14.0	126.0(6:30)	14.0	164.0(11:40)	16.0	95.0(7:30)	15.0	173.0(13:50)
11/23	6.0	271.0(0:00)	5.0	114.0(17:00)	11.0	87.0(23:20)	6.0	73.0(23:35)
11/24	11.0	129.0(23:55)	10.0	134.0(22:35)	14.0	113.0(8:25)	7.0	81.0(0:05)
11/25	14.0	134.0(5:05)	13.0	164.0(12:50)	15.0	106.0(5:30)	23.0	181.0(14:30)
11/26	11.0	84.0(22:45)	6.0	116.0(9:10)	13.0	116.0(23:10)	9.0	243.0(14:55)
11/27	13.0	128.0(5:15)	12.0	154.0(12:45)	18.0	108.0(8:00)	13.0	162.0(12:55)
11/28	11.0	316.0(15:05)	23.0	339.0(15:05)	12.0	281.0(15:20)	16.0	309.0(15:45)
11/29	5.0	128.0(2:35)	7.0	112.0(9:05)	11.0	100.0(5:40)	5.0	84.0(8:00)
11/30	6.	134.0(6:35)	8.0	106.0(19:20)	14.0	112.0(20:55)	8.0	188.0(15:15)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV 1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

WIND SPEED - WIND DIRECTION

SITE DATE	(8-FT) 023		(30-FT) 023		(100-FT) 023		(200-FT) 023	
11/ 1			15.0	203.0(12:55)	16.0	192.0(12:55)	16.0	206.0(12:55)
11/ 2			12.0	39.0(16:00)	13.0	29.0(16:00)	13.0	29.0(16:00)
11/ 3			11.0	299.0(15:55)	12.0	293.0(15:45)	14.0	304.0(15:45)
11/ 4			8.0	293.0(0:10)	10.0	289.0(0:20)	9.0	295.0(0:00)
11/ 5			9.0	344.0(13:55)	11.0	309.0(17:05)	11.0	326.0(17:05)
11/ 6			13.0	213.0(12:45)	13.0	203.0(12:45)	14.0	256.0(16:50)
11/ 7			15.0	193.0(11:25)	17.0	189.0(11:45)	16.0	209.0(11:45)
11/ 8			15.0	219.0(11:20)	18.0	194.0(13:25)	18.0	230.0(11:20)
11/ 9			13.0	7.0(14:55)	12.0	344.0(14:45)	15.0	10.0(14:55)
11/10			12.0	236.0(18:10)	14.0	225.0(18:10)	17.0	245.0(18:10)
11/11			11.0	344.0(14:45)	13.0	198.0(19:30)	15.0	224.0(19:30)
11/12			18.0	199.0(21:45)	21.0	189.0(21:40)	26.0	207.0(21:40)
11/13			26.0	352.0(12:30)	22.0	307.0(12:05)	23.0	219.0(1:20)
11/14			13.0	181.0(13:05)	17.0	184.0(23:10)	22.0	231.0(23:10)
11/15	9.0	312.0(15:55)	12.0	196.0(0:10)	16.0	183.0(0:10)	21.0	201.0(0:10)
11/16	5.0	335.0(13:30)	14.0	183.0(17:25)	14.0	167.0(17:35)	16.0	193.0(18:40)
11/17	13.0	281.0(23:05)	16.0	237.0(12:20)	19.0	186.0(23:05)	23.0	208.0(23:05)
11/18	21.0	190.0(9:40)	26.0	194.0(9:40)	31.0	181.0(9:55)	33.0	202.0(9:55)
11/19	7.0	271.0(16:15)	13.0	263.0(16:15)	13.0	185.0(19:35)	14.0	178.0(20:45)
11/20	14.0	215.0(15:05)	17.0	204.0(15:05)	19.0	189.0(15:05)	21.0	180.0(5:40)
11/21	11.0	183.0(23:50)	22.0	179.0(23:45)	26.0	169.0(23:40)	31.0	188.0(23:40)
11/22	16.0	180.0(0:50)	23.0	183.0(0:50)	27.0	166.0(0:45)	31.0	185.0(0:10)
11/23	5.0	219.0(18:05)	16.0	331.0(0:20)	20.0	323.0(0:20)	22.0	335.0(0:20)
11/24	5.0	253.0(13:15)	11.0	174.0(17:55)	15.0	189.0(18:20)	16.0	201.0(18:10)
11/25	24.0	192.0(12:50)	33.0	195.0(12:50)	35.0	185.0(12:55)	39.0	203.0(12:55)
11/26	9.0	309.0(14:30)	12.0	304.0(14:30)	12.0	295.0(14:30)	15.0	259.0(3:55)
11/27	15.0	195.0(12:50)	21.0	185.0(14:45)	23.0	178.0(14:45)	23.0	200.0(14:45)
11/28	12.0	342.0(15:30)	23.0	349.0(15:30)	28.0	335.0(15:30)	30.0	345.0(15:30)
11/29	7.0	359. (12:15)	9.0	222.0(1:00)	10.0	246.0(1:10)	10.0	295.0(0:05)
11/30	[illegible]	211.0(15:15)	11.0	123.0(13:30)	13.0	161.0(16:50)	15.0	183.0(16:50)

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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV   1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

                                          RELATIVE HUMIDITY
                   (8-FT)                 (30-FT)                (100-FT)               (200-FT)
     SITE           023                    023                    023                    023
DATE
-----------------------------------------------------------------------------------------------------
11/ 1            92.0( 7:30)            91.0( 7:45)            94.0( 7:10)            98.0( 7:15)
11/ 2            95.0( 5:25)           100.0( 5:20)            99.0( 5:20)           100.0( 4:05)
11/ 3            99.0(18:10)           100.0( 0:15)           100.0( 0:15)           100.0( 0:00)
11/ 4            97.0(23:00)           100.0( 0:00)           100.0( 0:00)           100.0( 0:00)
11/ 5            80.0( 1:20)            88.0( 7:50)            90.0( 8:25)           100.0( 6:40)
11/ 6            87.0( 4:30)            85.0( 7:40)            85.0( 7:55)            98.0(14:05)
11/ 7            75.0( 6:50)            72.0( 6:10)            68.0( 6:10)            71.0( 5:50)
11/ 8            76.0( 6:15)            70.0( 6:30)            71.0(23:55)            71.0(23:55)
11/ 9           100.0( 6:25)           100.0( 1:40)           100.0( 2:00)           100.0( 1:15)
11/10           100.0( 5:10)           100.0( 0:00)           100.0( 0:30)           100.0( 0:00)
-----------------------------------------------------------------------------------------------------
11/11            87.0( 0:25)            85.0( 4:00)            82.0( 0:00)            85.0( 0:00)
11/12            55.0(12:00)            65.0( 1:35)            60.0(12:00)            63.0(12:00)
11/13            65.0(23:50)            61.0(23:35)            59.0(23:50)            64.0(22:55)
11/14            73.0( 5:30)            71.0( 5:30)            64.0( 5:25)            70.0( 2:05)
11/15            63.0( 7:10)            64.0( 8:45)            62.0( 3:45)            60.0(10:35)
11/16            67.0( 5:40)            67.0( 6:00)            64.0( 6:20)            69.0( 6:40)
11/17            57.0( 6:00)            57.0( 7:10)            52.0( 7:20)            55.0( 4:30)
11/18            91.0(20:10)            99.0(20:15)            97.0(19:50)           100.0(19:50)
11/19            91.0( 8:50)           100.0( 8:55)            97.0( 5:45)           100.0( 5:50)
11/20            66.0( 2:45)            64.0( 2:40)            58.0( 0:05)            63.0( 0:15)
-----------------------------------------------------------------------------------------------------
11/21            38.0(23:55)            39.0(18:15)            39.0(23:00)            41.0(17:55)
11/22            98.0(23:15)           100.0(21:30)           100.0(22:00)           100.0(21:20)
11/23            99.0( 2:15)           100.0( 0:00)           100.0( 0:00)           100.0( 0:00)
11/24            81.0( 4:40)            75.0( 0:50)            63.0( 9:40)            66.0( 6:35)
11/25            58.0( 0:00)            57.0( 6:50)            52.0( 6:40)            53.0( 0:00)
11/26            54.0( 7:45)            56.0( 6:25)            62.0( 6:55)            66.0( 7:20)
11/27            63.0(23:40)            75.0(23:40)            74.0(23:40)            71.0(23:55)
11/28           100.0( 7:00)           100.0( 2:15)           100.0( 2:45)           100.0( 2:10)
11/29            92.0( 3:40)            91.0( 5:35)            94.0( 5:15)           100.0( 2:50)
11/30            73.0( 2:30)            64.0( 3:15)            63.0( 3:05)            73.0( 4:30)
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TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR NOV   1 THRU 30
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER;  WIND SPEED-MILES PER HOUR;
        TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

                                          TEMPERATURE OUTSIDE
                 (8-FT)              (30-FT)              (100-FT)              (200-FT)
      STIE        023                 023                  023                   023
DATE
-----------------------------------------------------------------------------------------------
11/ 1        43.0(15:15)         41.0(14:20)          41.0(14:40)           42.0(14:20)
11/ 2        44.0(14:05)         42.0(14:05)          42.0(14:00)           43.0(12:50)
11/ 3        33.0(12:25)         31.0(12:25)          30.0( 0:00)           30.0( 0:00)
11/ 4        37.0(14:00)         35.0(14:00)          36.0(14:00)           40.0(14:00)
11/ 5        41.0(15:10)         38.0(14:40)          36.0(15:05)           41.0(14:45)
11/ 6        42.0(12:35)         40.0(13:05)          40.0(13:05)           42.0(12:10)
11/ 7        45.0(13:35)         44.0(14:45)          44.0(14:35)           44.0(13:15)
11/ 8        50.0(13:30)         46.0(12:05)          47.0(15:00)           48.0(12:15)
11/ 9        35.0( 9:50)         35.0( 0:00)          36.0( 0:00)           36.0( 0:00)
11/10        37.0(12:25)         36.0(15:00)          36.0(14:50)           41.0(12:15)
-----------------------------------------------------------------------------------------------
11/11        41.0(14:05)         39.0(14:00)          40.0(15:55)           41.0(14:30)
11/12        45.0(15:15)         44.0(12:10)          44.0(12:15)           45.0(12:15)
11/13        50.0(11:[illegible])         46.0(12:20)          48.0(12:20)           47.0(13:40)
11/14        50.0(13:55)         47.0(12:50)          47.0(12:35)           49.0(12:45)
11/15        48.0(15:35)         46.0(15:40)          47.0(15:55)           48.0(13:10)
11/16        48.0(14:25)         45.0(14:40)          46.0(15:05)           48.0(13:15)
11/17        50.0(15:20)         46.0(12:00)          46.0(12:00)           47.0(12:10)
11/18        45.0( 9:20)         42.0( 9:25)          41.0( 9:20)           41.0( 9:20)
11/19        35.0(15:20)         36.0(15:45)          36.0(15:25)           37.0(15:30)
11/20        45.0(13:20)         44.0(12:50)          44.0(13:00)           45.0(13:00)
-----------------------------------------------------------------------------------------------
11/21        53.0(12:20)         49.0(12:10)          50.0(12:20)           54.0(12:20)
11/22        50.0(15:00)         49.0(13:40)          49.0(13:00)           49.0(12:10)
11/23        32.0(15:40)         30.0(15:25)          30.0(15:15)           37.0(13:05)
11/24        41.0(13:35)         40.0(15:20)          40.0(14:00)           44.0(11:20)
11/25        47.0(14:35)         45.0(14:35)          45.0(14:35)           45.0(14:05)
11/26        39.0(14:20)         37.0(13:50)          37.0(14:20)           38.0(13:50)
11/27        44.0(13:10)         42.0(13:40)          42.0(13:45)           43.0(13:40)
11/28        31.0( 0:45)         29.0( 0:25)          30.0( 0:35)           30.0( 0:40)
11/29        25.0(14:45)         26.0(14:45)          25.0(14:55)           32.0(14:00)
11/30        35.0(14:25)         35.0(14:25)          34.0(14:05)           37.0(11:10)
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          TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  NOV  1-30
                   (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                      NITROGEN OXIDES(NOX)
                                            1-HOUR
SITE                024                                023

      1 11/11( 1:55- 2:55)   47.4         1 11/29( 9:55-10:55)   54.1
      2 11/10( 7:15- 8:15)   45.7         2 11/28( 8:10- 9:10)   49.9
      3 11/10( 4:35- 5:35)   44.3         3 11/29(11:00-12:00)   45.6
      4 11/14( 5:50- 6:50)   44.3         4 11/30( 9:35-10:35)   43.8
      5 11/11( 0:40- 1:40)   40.7         5 11/28( 6:00- 7:00)   43.1
-----------------------------------------------------------------------------------------

                                       NITRIC OXIDE(NO)
                                            1-HOUR
SITE                024                                023

      1 11/10( 5:50- 6:50)   44.3         1 11/28( 8:10- 9:10)   38.5
      2 11/10( 7:40- 8:40)   41.8         2 11/29( 9:55-10:55)   37.4
      3 11/10( 4:20- 5:20)   41.3         3 11/29( 8:10- 9:10)   34.0
      4 11/11( 1:50- 2:50)   41.3         4 11/12( 3:50- 4:50)   29.6
      5 11/14( 9:25-10:25)   37.6         5 11/12( 7:05- 8:05)   28.2
-----------------------------------------------------------------------------------------

                                    NITROGEN DIOXIDE(NO2)
                                            1-HOUR
SITE                024                                023

      1 11/26(22:30-23:30)   26.7         1 11/26(16:00-17:00)   21.2
      2 11/27( 4:05- 5:05)   24.7         2 11/30(10:50-11:50)   20.4
      3 11/26(23:35- 0:35)   22.5         3 11/29(11:00-12:00)   18.9
      4 11/11( 3:25- 4:25)   21.1         4 11/29(12:15-13:15)   18.9
      5 11/27( 5:15- 6:15)   20.9         5 11/28( 3:35- 4:35)   17.2
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                 TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  NOV  1-30
                          (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                          SULFUR DIOXIDE
                                              1-HOUR
 TE                 020                        021                                    022

       1 11/ 1(13:50-14:50)     4.6    1 11/ 1( 1:35- 2:35)   32.8    1 11/ 6(17:00-18:00)   13.0
       2 11/ 9(15:30-16:30)     0.4    2 11/26( 4:50- 5:50)   27.4    2 11/ 6(15:30-16:30)   11.3
                                       3 11/26( 6:50- 7:50)   26.9    3 11/ 6(18:05-19:05)   11.3
                                       4 11/25(12:40-13:40)   26.7    4 11/ 8( 6:50- 7:50)   10.0
                                       5 11/26( 9:25-10:25)   25.2    5 11/ 6(11:00-12:00)    9.8
------------------------------------------------------------------------------------------------
.TE                 023                        024

       1 11/ 1(11:15-12:15)     0.2    1 11/29(21:10-22:10)    5.2
                                       2 11/29(22:40-23:40)    5.2
                                       3 11/30( 0:20- 1:20)    5.2
                                       4 11/30( 2:10- 3:10)    5.2
                                       5 11/30( 4:20- 5:20)    5.2
------------------------------------------------------------------------------------------------

                                          SULFUR DIOXIDE
                                              3-HOUR
SITE                020                        021                                    022

       1 11/ 1(12:05-15:05)     1.8    1 11/ 1( 0:00- 3:00)   29.0    1 11/ 6(15:40-18:40)   12.0
       2 11/ 9(13:30-16:30)     0.1    2 11/26( 5:20- 8:20)   26.1    2 11/ 4(16:20-19:20)    9.1
                                       3 11/26(10:40-13:40)   24.7    3 11/10( 0:20- 3:20)    9.0
                                       4 11/26(15:20-18:20)   11.9    4 11/10( 6:20- 9:20)    8.9
                                       5 11/27( 2:50- 5:50)   11.4    5 11/ 8( 5:50- 8:50)    8.8
------------------------------------------------------------------------------------------------
SITE                023                        024

       1 11/ 1( 9:15-12:15)     0.0    1 11/29(22:40- 1:40)    4.8
                                       2 11/30( 2:10- 5:10)    4.8
                                       3 11/30( 5:15- 8:15)    4.7
                                       4 11/30( 8:20-11:20)    3.4
                                       5 11/29(12:55-15:55)    2.6
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              TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  NOV  1-30
                       (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                        SULFUR DIOXIDE
                                           24-HOUR
ITE               020                                021                                       022

      1 11/ 1-11/ 2( 1:00)      0.2       1 11/25-11/26(22:00)   18.6        1 11/ 6-11/ 7( 5:00)     8.6
      2 11/ 9-11/10( 2:00)      0.0       2 11/26-11/27(23:00)    7.4        2 11/ 9-11/10(19:00)     8.3
                                          3 11/27-11/28( 0:00)    4.1        3 11/ 4-11/ 5(14:00)     8.3
                                          4 11/ 1-11/ 2( 1:00)    2.5        4 11/ 7-11/ 8(17:00)     7.8
                                          5 11/ 2-11/ 3( 2:00)    0.1        5 11/11-11/12(20:00)     7.6
-------------------------------------------------------------------------------------------------------------
ITE               023                                024

      1 11/ 1-11/ 2( 1:00)      0.2       1 11/29-11/30(20:00)    3.7
                                          2 11/15-11/16(13:00)    0.1
                                          3 11/13-11/14(15:00)    0.0
                                          4 11/ 5-11/ 6( 4:00)    0.0

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                                       HYDROGEN SULFIDE(H2S)
                                             1-HOUR
ITE               020                                021                                       022

      1 11/ 9(20:00-21:00)     10.1       1 11/18( 1:25- 2:25)   58.9        1 11/18( 9:35-10:35)     4.7
      2 11/ 9(21:05-22:05)      9.6       2 11/20(19:10-20:10)   49.5        2 11/ 1(16:45-17:45)     2.5
      3 11/ 9(22:10-23:10)      7.1       3 11/18( 4:30- 5:30)   47.4        3 11/ 1(15:00-16:00)     2.4
      4 11/ 9(23:15- 0:15)      5.3       4 11/20(15:15-16:15)   37.6        4 11/ 1(10:40-11:40)     2.0
      5 11/10( 0:20- 1:20)      4.0       5 11/20( 3:40- 4:40)   33.1        5 11/ 1(17:50-18:50)     2.0
-------------------------------------------------------------------------------------------------------------
ITE               023                                024

      1 11/12( 5:40- 6:40)      3.2       1 11/ 5(15:55-16:55)    8.3
      2 11/ 5(22:45-23:45)      3.0       2 11/29(11:40-12:40)    0.9
      3 11/10(14:50-15:50)      1.4
      4 11/10(12:05-13:05)      0.8
      5 11/10( 8:55- 9:55)      0.5
-------------------------------------------------------------------------------------------------------------
```

```
                        TABLE VI. THE FIVE MAXIMUM AVERAGES FOR  NOV  1-30
                         (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                            TOTAL HYDROCARBON
                                                3-HOUR(6-9AM)
SITE               020                               023

    1 11/25( 6:00- 9:00) 1026.4         1 11/23( 6:00- 9:00)17865.0
    2 11/27( 6:00- 9:00)  976.8         2 11/22( 6:00- 9:00)16045.4
    3 11/23( 6:00- 9:00)  976.7         3 11/24( 6:00- 9:00)15109.1
    4 11/ 7( 6:00- 9:00)  975.5         4 11/ 7( 6:00- 9:00)10350.2
    5 11/26( 6:00- 9:00)  974.2         5 11/28( 6:00- 9:00)10178.2
---------------------------------------------------------------------------------------------

                                                METHANE
                                                3-HOUR(6-9AM)
SITE               020                               023

    1 11/ 9( 6:00- 9:00)  933.2         1 11/ 7( 6:00- 9:00)    96.7
    2 11/23( 6:00- 9:00)  921.9         2 11/ 8( 6:00- 9:00)    94.4
    3 11/15( 6:00- 9:00)  914.3         3 11/28( 6:00- 9:00)    94.3
    4 11/24( 6:00- 9:00)  874.2         4 11/30( 6:00- 9:00)    88.3
    5 11/16( 6:00- 9:00)  857.8         5 11/ 4( 6:00- 9:00)    86.5
---------------------------------------------------------------------------------------------

                                            NONMETHANE HYDROCARBON
                                                3-HOUR(6-9AM)
SITE               020                               023

    1 11/25( 6:00- 9:00)  197.6         1 11/23( 6:00- 9:00)17151.9
    2 11/ 7( 6:00- 9:00)  184.3         2 11/22( 6:00- 9:00)15371.7
    3 11/26( 6:00- 9:00)  154.0         3 11/24( 6:00- 9:00)14410.1
    4 11/27( 6:00- 9:00)  132.7         4 11/ 7( 6:00- 9:00) 9383.7
    5 11/ 8( 6:00- 9:00)   94.8         5 11/28( 6:00- 9:00) 9235.3
---------------------------------------------------------------------------------------------
```

```
          TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR  NOV  1-30
                    (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                       OZONE
                                      1-HOUR
SITE             020                                023

    1 11/27(11:50-12:50)  198.1         1 11/18(13:20-14:20)    64.6
    2 11/ 2(11:40-12:40)  197.3         2 11/21(10:55-11:55)    63.0
    3 11/25(14:20-15:20)  197.0         3 11/18( 9:35-10:35)    61.5
    4 11/27(12:55-13:55)  195.5         4 11/18(14:40-15:40)    61.4
    5 11/27(10:25-11:25)  190.5         5 11/21(13:10-14:10)    61.4
--------------------------------------------------------------------------------

                                   CARBON MONOXIDE
                                      1-HOUR
SITE             020                                023

    1 11/14(11:55-12:55) 1353.6         1 11/14(15:25-16:25)14563.1
    2 11/14(13:25-14:25) 1189.9         2 11/14(16:30-17:30)14432.9
    3 11/ 6(16:35-17:35) 1039.7         3 11/14(17:35-18:35)14205.4
    4 11/ 9(13:10-14:10) 1029.4         4 11/14(19:05-20:05)14100.6
    5 11/ 5( 8:40- 9:40)  993.0         5 11/14(20:15-21:15)13888.1
--------------------------------------------------------------------------------

                                   CARBON MONOXIDE
                                      8-HOUR
SITE             020                                023

    1 11/ 8(15:55-23:55)  983.1         1 11/14(14:55-22:55)14098.2
    2 11/ 9( 5:55-13:55)  978.7         2 11/14(23:55- 7:55)12922.6
    3 11/ 6(15:55-23:55)  975.9         3 11/15(23:55- 7:55)10083.2
    4 11/ 6( 2:55-10:55)  973.5         4 11/16( 8:55-16:55) 9579.4
    5 11/ 7(18:55- 2:55)  957.9         5 11/16(17:55- 1:55) 9255.1
--------------------------------------------------------------------------------
```

```
                   TABLE VI. THE FIVE MAXIMUM AVERAGES FOR  NOV  1-30
                    (UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

                                      PARTICULATE
                                        24-HOUR
SITE          020                          021                                022

        1   11/29   133.0          1   11/21    71.0          1   11/28   154.0
        2   11/23     7.0          2   11/22    27.0          2   11/29    22.0
        3   11/25     6.0          3   11/27    12.0          3   11/27    17.0
                                   4   11/25    11.0          4   11/26    10.0
                                   5   11/ 1     9.0          5   11/24     5.0
------------------------------------------------------------------------------------

SITE          023                          024

        1   11/27    25.0          1   11/27   178.0
        2   11/29    21.0          2   11/29   162.0
        3   11/ 1     7.0          3   11/25    11.0

------------------------------------------------------------------------------------
```

TABLE VII

FUNCTIONAL DEPENDENCE OF RECORDED PARAMETERS UPON WIND DIRECTION

CORPORATION

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        NITROGEN OXIDES(NOX)
                              TRAILER NO. -   20  PERIOD(11/ 1/74 TO 11/30/74)

                                                                   WIND DIRECTION
                      N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
ONCENTRATION
 UG/M**3
  GT  600    :                                                                                   :
 0 -  600    :                                                                                   :
 0 -  550    :                                                                                   :
 0 -  500    :                                                                                   :
 0 -  450    :                                                                                   :
 0 -  400    :                                                                                   :
 0 -  350    :                                                                                   :
i0 -  300    :                                                                                   :
10 -  250    :                                                                                   :
i0 -  200    :                                                                                   :
10 -  150    :                                                                                   :
50 -  100    :                                         1          1                              :     2
  LT   50    :       29   37   23  122 1091 1804 2498  263  364  225  118  225  596  457  222  138 :  8212
   TOTAL     :       29   37   23  122 1091 1804 2498  263  365  225  119  225  596  457  222  138 :  8214
              .........................................................................................
    MEAN               0.   2.   1.   7.   2.   3.   3.   2.   2.   1.   2.   1.   1.   2.   2.   1.    2.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITROGEN OXIDES(NOX)

TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

CONCENTRATION UG/M**3		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 600	:																	:	
550 - 600	:																	:	
500 - 550	:																	:	
450 - 500	:																	:	
400 - 450	:																	:	
350 - 400	:																	:	
300 - 350	:																	:	
250 - 300	:																	:	
200 - 250	:																	:	
150 - 200	:																	:	
100 - 150	:			1				1				1						:	3
50 - 100	:	4	7	8	6	4	3	5	9	6	2	30	5	14	21	24	37	:	185
LT 50	:	33	73	80	161	225	264	280	239	299	582	597	165	114	106	120	227	:	3565
TOTAL	:	37	80	89	167	229	267	286	248	305	584	628	170	128	127	144	264	:	3753
MEAN		14.	13.	12.	7.	5.	6.	6.	6.	4.	4.	8.	10.	14.	19.	22.	19.		9.

```
                          NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         NITRIC OXIDE(NO)
                                  TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                                 WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  600      :                                                                                :

 550 -  600     :                                                                                :

 500 -  550     :                                                                                :

 450 -  500     :                                                                                :

 400 -  450     :                                                                                :

 350 -  400     :                                                                                :

 300 -  350     :                                                                                :

 250 -  300     :                                                                                :

 200 -  250     :                                                                                :

 150 -  200     :                                                                                :

 100 -  150     :                                                                                :

  50 -  100     :                                            1         1                         :     2

   LT   50      :     27   23   23  122 1085 1781 2487  261  360  225  118  221  564  439  221  137 : 8094

    TOTAL       :     27   23   23  122 1085 1781 2487  261  361  225  119  221  564  439  221  137 : 8096
                  ........................................................................................

    MEAN                0.   1.   0.   4.   0.   1.   1.   1.   1.   0.   1.   1.   0.   0.   0.   0.    1.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         NITRIC OXIDE(NO)
                            TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                      WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  600     :                                                                                 :

 550 -  600    :                                                                                 :

 500 -  550    :                                                                                 :

 450 -  500    :                                                                                 :

 400 -  450    :                                                                                 :

 350 -  400    :                                                                                 :

 300 -  350    :                                                                                 :

 250 -  300    :                                                                                 :

 200 -  250    :                                                                                 :

 150 -  200    :                                                                                 :

 100 -  150    :                                                                                 :

  50 -  100    :    1    4    3    4    4    3    1    1    2        15    4    2   10    7    7 :    68

   LT   50     :   36   76   86  163  225  264  285  247  303  584  613  166  126  117  137  257 :  3685

   TOTAL       :   37   80   89  167  229  267  286  248  305  584  628  170  128  127  144  264 :  3753
               ...................................................................................................

   MEAN             9.   8.   7.   4.   3.   3.   3.   2.   2.   2.   5.   6.   8.  13.  13.  10.    5.
```

```
                NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        NITROGEN DIOXIDE(NO2)
                           TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                               WIND DIRECTION
                     N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  600    :                                                                                  :
 550 -  600   :                                                                                  :
 500 -  550   :                                                                                  :
 450 -  500   :                                                                                  :
 400 -  450   :                                                                                  :
 350 -  400   :                                                                                  :
 300 -  350   :                                                                                  :
 250 -  300   :                                                                                  :
 200 -  250   :                                                                                  :
 150 -  200   :                                                                                  :
 100 -  150   :                                                                                  :
  50 -  100   :                                                                                  :
   LT   50    :   27   23   23  122 1084 1780 2481  261  362  224  119  221  564  439  221  137 : 8088
    TOTAL     :   27   23   23  122 1084 1780 2481  261  362  224  119  221  564  439  221  137 : 8088
              ......................................................................................
     MEAN          0.   1.   1.   3.   2.   2.   2.   1.   1.   1.   1.   1.   1.   1.   1.   1.    2.
```

```
                          NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

              NITROGEN DIOXIDE(NO2)
                                  TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                                   WIND DIRECTION
                         N   NNE   NE   ENE    E   ESE   SE   SSE    S   SSW   SW   WSW    W   WNW   NW   NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  600      :                                                                                         :

550 -  600      :                                                                                         :

500 -  550      :                                                                                         :

450 -  500      :                                                                                         :

400 -  450      :                                                                                         :

350 -  400      :                                                                                         :

300 -  350      :                                                                                         :

250 -  300      :                                                                                         :

200 -  250      :                                                                                         :

150 -  200      :                                                                                         :

100 -  150      :                                                                                         :

 50 -  100      :                                                                                         :

   LT   50      :  37    80    89   167   229   267   286   248   305   584   628   170   128   127   144   264 : 3753

    TOTAL       :  37    80    89   167   229   267   286   248   305   584   628   170   128   127   144   264 : 3753
                  ..........................................................................................................

                    5.    5.    5.    3.    4.    3.    4.    3.    2.    2.    3.    4.    6.    6.    8.    9.    4.
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

       SULFUR DIOXIDE(SO2)
                            TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                     WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700     :                                                                              :

 650 -  700    :                                                                              :

 600 -  650    :                                                                              :

 550 -  600    :                                                                              :

 500 -  550    :                                                                              :

 450 -  500    :                                                                              :

 400 -  450    :                                                                              :

 350 -  400    :                                                                              :

 300 -  350    :                                                                              :

 250 -  300    :                                                                              :

 200 -  250    :                                                                              :

 150 -  200    :                                                                              :

 100 -  150    :                                                                              :

  50 -  100    :                                                                              :

   LT   50     :   28   34   22  119 1052 1724 2409  251  355  224  120  218  572  441  215  132 : 7916

    TOTAL      :   28   34   22  119 1052 1724 2409  251  355  224  120  218  572  441  215  132 : 7916
                ..................................................................................

     MEAN          0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      SULFUR DIOXIDE(SO2)
                                TRAILER NO. -  21  PERIOD(11/ 1/74 TO 11/30//4)

                                                               WIND DIRECTION
                          N   NNE    NE  ENE     E  ESE   SE  SSE     S  SSW   SW  WSW     W  WNW    NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700    :
                                                                                                           :
 650 -  700   :
                                                                                                           :
 600 -  650   :
                                                                                                           :
 550 -  600   :
                                                                                                           :
 500 -  550   :
                                                                                                           :
 450 -  500   :
                                                                                                           :
 400 -  450   :
                                                                                                           :
 350 -  400   :
                                                                                                           :
 300 -  350   :
                                                                                                           :
 250 -  300   :
                                                                                                           :
 200 -  250   :
                                                                                                           :
 150 -  200   :
                                                                                                           :
 100 -  150   :
                                                                                                           :
  50 -  100   :
                                                                                                           :
   LT   50    :  115  115   40   54  294 1640 1393 1204  586  216   93   66   94  143  429  988 : 7470
    TOTAL     :  115  115   40   54  294 1640 1393 1204  586  216   93   66   94  143  429  988 : 7470
                 .........................................................................................
     MEAN          1.   1.   1.   3.   1.   1.   1.   1.   1.   2.   2.   1.   1.   1.   1.   1.   1.
```

CORPORATION

```
                 NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        SULFUR DIOXIDE(SO2)
                         TRAILER NO. -  22  PERIOD(11/ 1/74 TO 11/30/74)

                                                    WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700    :                                                                                 :
 650 -  700   :                                                                                 :
 600 -  650   :                                                                                 :
 550 -  600   :                                                                                 :
 500 -  550   :                                                                                 :
 450 -  500   :                                                                                 :
 400 -  450   :                                                                                 :
 350 -  400   :                                                                                 :
 300 -  350   :                                                                                 :
 250 -  300   :                                                                                 :
 200 -  250   :                                                                                 :
 150 -  200   :                                                                                 :
 100 -  150   :                                                                                 :
  50 -  100   :                                                                                 :
   LT   50    :      49  120  234  537 1616 3295  428  153   72   82  130  323  692  340   91  106 : 8278
    TOTAL     :      49  120  234  537 1616 3295  428  153   72   82  130  323  692  340   91  106 : 8278
                  ..........................................................................................
     MEAN             3.   3.   3.   2.   2.   2.   2.   2.   2.   2.   2.   2.   2.   2.   3.   2.    2.
```

```
                 NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      SULFUR DIOXIDE(SO2)
                          TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                    WIND DIRECTION
                        N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700    :
                                                                                                 :
 650 -  700   :
                                                                                                 :
 600 -  650   :
                                                                                                 :
 550 -  600   :
                                                                                                 :
 500 -  550   :
                                                                                                 :
 450 -  500   :
                                                                                                 :
 400 -  450   :
                                                                                                 :
 350 -  400   :
                                                                                                 :
 300 -  350   :
                                                                                                 :
 250 -  300   :
                                                                                                 :
 200 -  250   :
                                                                                                 :
 150 -  200   :
                                                                                                 :
 100 -  150   :
                                                                                                 :
  50 -  100   :
                                                                                                 :
   LT   50    :    38   83   95  167  223  266  287  252  307  611  636  173  124  124  142  334 : 3867

    TOTAL     :    38   83   95  167  223  266  287  252  307  611  636  173  124  124  142  334 : 3867
                 ..................................................................................

     MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    0.
```

```
                NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      SULFUR DIOXIDE(SO2)
                       TRAILER NO. -  24  PERIOD(11/ 1/74 TO 11/30/74)

                                                       WIND DIRECTION
                    N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  700     :                                                                                  :
 650 -  700    :                                                                                  :
 600 -  650    :                                                                                  :
 550 -  600    :                                                                                  :
 500 -  550    :                                                                                  :
 450 -  500    :                                                                                  :
 400 -  450    :                                                                                  :
 350 -  400    :                                                                                  :
 300 -  350    :                                                                                  :
 250 -  300    :                                                                                  :
 200 -  250    :                                                                                  :
 150 -  200    :                                                                                  :
 100 -  150    :                                                                                  :
  50 -  100    :                                                                                  :
   LT   50     :   27   72  301 1320 1676  630  253  573  558  317  192  219  356  270  101   52 : 6917
    TOTAL      :   27   72  301 1320 1676  630  253  573  558  317  192  219  356  270  101   52 : 6917
               ........................................................................................
     MEAN            0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    0.
```

```
                          NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

              HYDROGEN SULFIOF(H2S)
                                 TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                         WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
    CONCENTRATION
      UG/M**3
      GT  140    :                                                                                   :
   130 -  140    :                                                                                   :
   120 -  130    :                                                                                   :
   110 -  120    :                                                                                   :
   100 -  110    :                                                                                   :
    90 -  100    :                                                                                   :
    80 -   90    :                                                                                   :
    70 -   80    :                                                                                   :
    60 -   70    :                                                                                   :
    50 -   60    :                                                                                   :
    40 -   50    :                                                                                   :
    30 -   40    :                                                                                   :
    20 -   30    :                                                                                   :
    10 -   20    :                              2    1                                             :     3
      LT   10    :    28   34   22   84 1050 1719 2402  247  356  224  120  220  572  442  214  132 :  7866
       TOTAL     :    28   34   22   84 1050 1721 2403  247  356  224  120  220  572  442  214  132 :  7869
                    ........................................................................................
        MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.     0.
```

```
                 NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      HYDROGEN SULFIDE(H2S)
                              TRAILER NO. -  21  PERIOD(11/ 1/74 TO 11/30/74)

                                                         WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
  GT  140     :                                                                                :

130 -  140    :                                                                                :

120 -  130    :                                                                                :

110 -  120    :                                                                                :

100 -  110    :                                1              1                                :     2

 90 -  100    :                                3    1         0                                :     4

 80 -   90    :                           3    1    0    1    0                                :     5

 70 -   80    :                           2    2    1    1    0                                :     6

 60 -   70    :                           5    1    3    2    1                                :    12

 50 -   60    :                          10    7    4    0    0                                :    21

 40 -   50    :                      1   17    7    6    2    1                                :    34

 30 -   40    :                      2   15    9   10    2    3                                :    41

 20 -   30    :                      3   17    7   11    4    0    1                           :    43

 10 -   20    :                 1    2   10   15    4    3    3    0    1                      :    39

   LT   10    :    96  100   43   49  283 1411 1168  977  446  167   78   58   88  109  228  603 :  5904

   TOTAL      :    96  100   43   50  291 1490 1221 1017  461  176   79   59   88  109  228  603 :  6111
                 ...................................................................................

     MEAN           0.   0.   0.   0.   1.   2.   2.   2.   1.   2.   0.   0.   0.   0.   0.   0.     2.
```

```
                       NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

       HYDROGEN SULFIDE(H2S)
                                  TRAILER NO. -  22  PERIOD(11/ 1/74 TO 11/30/74)

                                                                      WIND DIRECTION
                             N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
    GT  140     :                                                                                  :

 130 -  140     :                                                                                  :

 120 -  130     :                                                                                  :

 110 -  120     :                                                                                  :

 100 -  110     :                                                                                  :

  90 -  100     :                                                                                  :

  80 -   90     :                                                                                  :

  70 -   80     :                                                                                  :

  60 -   70     :                                                                                  :

  50 -   60     :                                                                                  :

  40 -   50     :                                                                                  :

  30 -   40     :                                                                                  :

  20 -   30     :                                                                                  :

  10 -   20     :                                                                                  :

    LT   10     :   49  119  234  537 1616 3295  428  165   72   82  130  323  692  340   91  106 : 8279

      TOTAL     :   49  119  234  537 1616 3295  428  165   72   82  130  323  692  340   91  106 : 8279
                ...........................................................................................

      MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.     0.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         HYDROGEN SULFIDE(H2S)
                           TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                  WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT  140     :                                                                                  :
 130 -  140    :                                                                                  :
 120 -  130    :                                                                                  :
 110 -  120    :                                                                                  :
 100 -  110    :                                                                                  :
  90 -  100    :                                                                                  :
  80 -   90    :                                                                                  :
  70 -   80    :                                                                                  :
  60 -   70    :                                                                                  :
  50 -   60    :                                                                                  :
  40 -   50    :                                                                                  :
  30 -   40    :                                                                                  :
  20 -   30    :                                                                                  :
  10 -   20    :                                                                                  :
   LT   10     :  38   83   95  167  229  266  287  252  307  616  637  173  129  127  143  355  : 3904
    TOTAL      :  38   83   95  167  229  266  287  252  307  616  637  173  129  127  143  355  : 3904
               .......................................................................................
    MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    0.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

     HYDROGEN SULFIDE(H2S)
                              TRAILER NO. -  24  PERIOD(11/ 1/74 TO 11/30/74)

                                                            WIND DIRECTION
                    N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  140    :                                                                                :

130 -  140    :                                                                                :

120 -  130    :                                                                                :

110 -  120    :                                                                                :

100 -  110    :                                                                                :

 90 -  100    :                                                                                :

 80 -   90    :                                                                                :

 70 -   80    :                                                                                :

 60 -   70    :                                                                                :

 50 -   60    :                                                                                :

 40 -   50    :                                                                                :

 30 -   40    :                                                                                :

 20 -   30    :                                                                                :

 10 -   20    :                                                                6    3           :     9

   LT   10    :    31   78  324 1348 1693  645  263  580  569  358  235  245  387  293  106   52 :  7207

    TOTAL     :    31   78  324 1348 1693  645  263  580  569  358  235  245  393  296  106   52 :  7216
                 ..........................................................................................

     MEAN           0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.    0.
```

```
                         NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

         TOTAL HYDROCARBONS
                              TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                      WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT 6000    :                                                                                :
 5400 - 6000  :                                                                                :
 4800 - 5400  :                                                                                :
 4200 - 4800  :                                                                                :
 3600 - 4200  :                                                                                :
 3000 - 3600  :                                                                                :
 2400 - 3000  :                                                                                :
 1800 - 2400  :                                                                                :
 1200 - 1800  :                    1    4    4    3    1                                     1 :    14
  600 - 1200  :          4   11   28  391  774 1207   99  157  104   63  117  188  145   84   46 :  3418
    LT  600   :          1    4   12  182  346  527   44   68   52   28   52   85   64   36   21 :  1522
    TOTAL     :     0    5   15   41  577 1124 1737  144  225  156   91  169  273  209  120   68 :  4954
                ..........................................................................................
    MEAN            0. 728. 643. 617. 625. 648. 640. 609. 599. 598. 619. 602. 609. 627. 617. 615. 631.
```

```
                NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

     TOTAL HYDROCARBONS
                             TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                      WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  CONCENTRATION
    UG/M**3
    GT 30000     :          4        14   15    2    8   20   36   31   14         3    1    2    2 :  152
 27000 - 30000   :          0    1    4    2    3    0    1    4    1    5    3    0    0    0    0 :   24
 24000 - 27000   :          0    0    0    0    0    0    2    4    0    0    0    0    0    0    0 :    6
 21000 - 24000   :          0    0    0    1    0    0    0    0    0    0    1    0    1    0    0 :    3
 18000 - 21000   :     6   11   15   24   18   36   35   32   22   34   52   18   10   19   22   13 :  367
 15000 - 18000   :     5   11   18   18   26   23   25   20   22   54   76   15   20   22   26   40 :  421
 12000 - 15000   :     0    4    6    4    6    3    3    4    2   15   17    1    4    2    1   12 :   84
  9000 - 12000   :     1    1    3    4   11    2    4    7   14   29   26    9    6    5    2   12 :  136
  6000 -  9000   :     1    7    5   11    8   13    9    7    6   18   35    7    8   10    9   10 :  164
  3000 -  6000   :     5   13   13   30   29   27   21   32   35   53   79   13   17   28   31   49 :  475
     LT  3000    :     9   23   22   50   85  114  167   99  136  182  288   49   40   29   43   87 : 1423
      TOTAL      :    27   74   83  159  201  223  272  224  281  417  592  116  108  117  136  225 : 3255
                 ..........................................................................................
   MEAN/100            9.  10.  10.  11.   9.   7.   7.  10.  10.   9.   7.   8.   9.  10.   9.   7.    8.
```

```
                        NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

             METHANE(CH4)
                                  TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                                 WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  CONCENTRATION
    UG/M**3
    GT 6000     :                                                                                 :
 5400 - 6000    :                                                                                 :
 4800 - 5400    :                                                                                 :
 4200 - 4800    :                                                                                 :
 3600 - 4200    :                                                                                 :
 3000 - 3600    :                                                                                 :
 2400 - 3000    :                                                                                 :
 1800 - 2400    :                                                                                 :
 1200 - 1800    :                         1    1         1                                         :    3
  600 - 1200    :          4   11   29  394  777 1207   99  157  104   63  117  187  144   84   46 : 3423
     LT  600    :          1    4   12  182  346  529   44   67   52   28   51   84   64   36   21 : 1521
      TOTAL     :     0    5   15   41  577 1124 1736  144  224  156   91  168  271  208  120   67 : 4947
                ....................................................................................................
       MEAN           0. 654. 605. 569. 576. 593. 578. 561. 556. 549. 560. 557. 564. 578. 581. 564. 577.
```

```
                        NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      METHANE(CH4)
                                   TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                            WIND DIRECTION
                          N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  CONCENTRATION
     UG/M**3
     GT 30000   :                                                                                   :
27000 - 30000   :                                                                                   :
24000 - 27000   :                                                                                   :
21000 - 24000   :                                                                                   :
18000 - 21000   :                                                                                   :
15000 - 18000   :                                                                                   :
12000 - 15000   :                                                                                   :
 9000 - 12000   :                                                                                   :
 6000 -  9000   :                                                                                   :
 3000 -  6000   :                                                                                   :
      LT  3000  :        19   61   75  150  192  203  254  217  269  397  499  104  104  117  125  188 : 2974
       TOTAL    :        19   61   75  150  192  203  254  217  269  397  499  104  104  117  125  188 : 2974
                     ...................................................................................
        MEAN             72.  64.  67.  69.  69.  72.  71.  70.  67.  68.  67.  71.  73.  73.  72.  75.   70.
```

```
                  NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      NON-METHANE HYDROCARBONS
                          TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                        WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT 6000     :                                                                              :
                                                                                              
 5400 - 6000   :                                                                              :

 4800 - 5400   :                                                                              :

 4200 - 4800   :                                                                              :

 3600 - 4200   :                                                                              :

 3000 - 3600   :                                                                              :

 2400 - 3000   :                                                                              :

 1800 - 2400   :                                                                              :

 1200 - 1800   :                                                                              :

  600 - 1200   :                              1    4                                       2 :    7

     LT  600   :         5   15   41  578 1123 1731  144  224  155   91  168  271  208  120   65 : 4939

     TOTAL     :    0    5   15   41  578 1124 1735  144  224  155   91  168  271  208  120   67 : 4946
                ......................................................................................

      MEAN          0.  65.  38.  49.  49.  55.  63.  48.  46.  50.  60.  49.  46.  52.  36.  52.  55.
```

```
                NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

     NON-METHANE HYDROCARBONS
                        TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                    WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
   GT 30000  :          3         11   12    1    6   18   25   17   11         2    1    2    2 :  111

27000 - 30000  :        1    1    7    5    4    2    3   15   15    8    3    1    0    0    0 :   65

24000 - 27000  :        0    0    0    0    0    0    2    3    0    0    0    0    0    0    0 :    5

21000 - 24000  :        0    0    0    1    0    0    0    1    0    0    1    0    1    0    0 :    4

18000 - 21000  :   3    6   12   23   17   34   32   27   20   29   38   13    7   10   15    8 :  294

15000 - 18000  :   4   10   16   17   17   12   16   18   15   30   45   17   20   31   27   33 :  328

12000 - 15000  :   0    2    6    1   10   10   12    9    9   33   30    3    4    1    4   13 :  147

 9000 - 12000  :   1    3    2    5   12    4    3    7   10   30   33    7    4    5    2    9 :  137

 6000 -  9000  :   1    3    3    7    7    4    2    1    8   13   20    4    8    6    4    5 :   96

 3000 -  6000  :   2   12   12   26   25   31   22   30   21   49   79   12   16   28   25   28 :  418

   LT  3000  :     8   19   21   50   85  107  167  103  142  178  239   43   41   32   45   92 : 1372

    TOTAL    :    19   59   73  147  191  207  252  218  269  394  503  103  103  115  124  190 : 2977
               ........................................................................................

  MEAN/100          8.  12.  10.  11.   9.   7.   6.   9.   9.   8.   7.   8.   8.   9.   8.   6.   8.
```

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

CARBON MONOXIDE(CO)

TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 2000 :								1	1								: 2
1800 - 2000 :								0	0								: 0
1600 - 1800 :								0	0								: 0
1400 - 1600 :								0	0		1				1		: 2
1200 - 1400 :							1	2	0	1	0	1			1		: 6
1000 - 1200 :					3	4	5	4	2	1	0	5	5		0		: 29
800 - 1000 :		3	2	3	81	175	196	29	51	28	14	16	20	29	6	4	: 657
600 - 800 :		0	0	3	5	27	9	2	1	1	1	0	1	0	0	1	: 51
400 - 600 :		2	8	12	240	456	787	41	78	54	32	61	136	100	75	44	: 2126
200 - 400 :		0	3	13	163	224	257	29	33	33	22	45	28	18	4	1	: 873
LT 200 :		0	5	25	324	445	511	57	65	65	43	89	58	35	10	1	: 1733
TOTAL :	0	5	18	56	816	1331	1766	165	231	183	113	217	248	182	97	51	: 5479
MEAN	0.	760.	373.	271.	315.	363.	373.	397.	423.	352.	327.	296.	395.	446.	476.	505.	366.

CORPORATION

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

```
CARBON MONOXIDE(CO)
                            TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                    WIND DIRECTION
                  N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
  GT 2000    :   23   58   69  135  171  187  227  194  250  452  427   95   90   84   99  189 : 2750
1800 - 2000  :    0    3    3    2    1    6    1    0    0    5    8    1    2    2    3   16 :   53
1600 - 1800  :    1    1    2    1    2    8    1    0    1    4    2    2    2    1    1    6 :   35
1400 - 1600  :    0    1    0    5    9   15    7    9    2    5    4   10    2    2    2    2 :   75
1200 - 1400  :    3    4    3    2   12   10   10    9    7    9   26    5    5    4    9    4 :  122
1000 - 1200  :    0    1    1    1    7    8    4    5    2   16   37   27    2    1    0    0 :  112
 800 - 1000  :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    1 :    1
 600 -  800  :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
 400 -  600  :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
 200 -  400  :    0    0    0    0    0    0    1    0    0    1    1    0    0    1    1    0 :    5
   LT  200   :    0    0    0    0    0    0   75    0    0   75  151    0    0   75   75    0 :  451
   TOTAL     :   27   68   78  146  202  234  326  217  262  567  656  140  103  170  190  218 : 3604
              ...........................................................................................

 MEAN/100        45.  52.  53.  52.  42.  38.  28.  41.  39.  44.  28.  32.  30.  18.  19.  32.  35.
```

```
                     NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

        OZONE(O3)
                              TRAILER NO. -  20  PERIOD(11/ 1/74 TO 11/30/74)

                                                           WIND DIRECTION
                       N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 CONCENTRATION
   UG/M**3
    GT  160    :                                                                                 :

 150 -  160    :                                                                                 :

 140 -  150    :                                                                                 :

 130 -  140    :                                                                                 :

 120 -  130    :                                                                                 :

 110 -  120    :                                1    1         1    1                            :     4

 100 -  110    :   4               1   30   17   10   13   11   13    4    4   21   18    9   11 :   166

  90 -  100    :   6    5    1     3    3    6   16   30   79   48   23   40   46    8   22   37 :   373

  80 -   90    :   0    2    3    10   39   25   65   46   77   65   44   78   79   58   56   24 :   671

  70 -   80    :   7    6    5    21   47   59   99   32   21   10    5   13   37   44   17   11 :   434

  60 -   70    :   1    1    3    10  116  228  424    3   20    4    0    1   88   55    9    1 :   964

  50 -   60    :   0    0    3     5  164  309  464    6    5    1    0    1   42   41   10    0 :  1051

   LT   50     :   0    2    3    65  802 1342 1577   84   51   11    2   13  148  145   50   10 :  4306

    TOTAL      :  18   16   18   116 1201 1987 2656  214  265  153   78  150  461  369  173   94 :  7969
               ......................................................................................

    MEAN          88.  72.  60.  35.  31.  29.  32.  58.  73.  84.  88.  82.  57.  51.  64.  83.   40.
```

```
                    NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

      OZONE(O3)

                          TRAILER NO. -  23  PERIOD(11/ 1/74 TO 11/30/74)

                                                            WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
CONCENTRATION
  UG/M**3
   GT  160    :
                                                                                                  :
150 -  160    :
                                                                                                  :
140 -  150    :
                                                                                                  :
130 -  140    :
                                                                                                  :
120 -  130    :
                                                                                                  :
110 -  120    :
                                                                                                  :
100 -  110    :
                                                                                                  :
 90 -  100    :
                                                                                                  :
 80 -   90    :                                                1    1                             :     2
 70 -   80    :                                                0   10    4    2                   :    16
 60 -   70    :                                                6   70   33    4                   :   113
 50 -   60    :                          1    5    4    5     39   90   37    2    3              :   186
    LT  50    :       18   45   52  115  149  140  163  177  211  267  281   48   33   43   30   48 : 1822
     TOTAL    :       18   46   52  115  150  145  167  182  257  438  355   56   36   43   30   48 : 2139
              ............................................................................................
      MEAN            18.  24.  23.  24.  26.  30.  31.  28.  34.  40.  32.  29.  28.  23.  21.  23.   31.
```

TABLE VIII

DIURNAL VARIATION OF VARIOUS RECORDED PARAMETERS

CORPORATION

DIURNAL VARIATION OF [illegible]TROGEN OXIDES(UG/M**3)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	*	*	*	16	16	14	9	11	*	11	10	*	11	10	23		*	*	*	*	*	*	*	*	8
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
4	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	1
5	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	9	*	*	*	4
6	*	*	*	*	11	12	12	11	12	*	*	*	*	*	*	*		*	*	*	*	*	*	*	6
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	11	*	*	*	2
9	*	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11	11	13	6
10	10	*	*	45	40	43	44	45	41	37	22	12	17	22	23	25	26	30	29	28	28	34	30	34	2
11	39	36	47	34	34	23	[illegible]	29	25	24	26	10	*	*	*	*	*	*	*	*	*	*	*	*	1
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
13	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
15	*	*	*	*	*	*	*	9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
19															*	*	*	*	*	*	*	*	*		0
20	*	*	*	*	11	10	9	9	9	*	9	*	*	*	*	*	*	*	*	*	*	*	*	*	5
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
25	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	10	12	4
26	13	*	*	*	*	*	9	9	9	*	*	*	*		*	10	11	16	18	19	19	21	25	26	12
27	21	16	18	20	27	20	19	19	18	18	18		*	*	*	*	*	*	*	*	*	*	*	*	12
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
29	9	9	11	10	10	10	12	12	11	11	*	*	*	*	*	*	*	11	*	*	*	*	*	*	7
30	*	*	*	*	*	*	*	11	13	9	9	*	*	*	*	*	*	*	*	9	*	*	*	*	7
MEAN	5.	5.	5.	5.	7.	7.	7.	7.	7.	6.	5.	2.	2.	3.	3.	2.	2.	4.	4.	4.	4.	5.	5.	5.	

TOTAL NUMBER OF OBSERVATIONS = 8211   MEAN = 5.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                         DIURNAL VARIATION OF NITROGEN OXIDES(UG/M**3)
                          TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                             HOUR
        1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 MEAN
DAY

  1     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  2     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  3     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  4     *    *    *    *    *    *    *    *    *    *    *    *    *    *              *    *    *    *    *    *    *    *    0.
  5     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    1.
  6     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    1.
  7     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  8     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  9     *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 10     *    *    *   14   13   18   15   16   13   16   19   18   21   14   17   16   17   18   18   20   20   17   13   15   15.
 11    14   14   16    *    *    *    *    *    *    *    *    9    *        20                  13   15        17        17   10.
 12    25   26   24   25   25   27   25   25   25   24   22             16   15   16   20   22   24   21   24   20   20   21   23.
 13    21   21   22    *    *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    4.
 14     *    *    *    *    *    *    *    *    *   10    9    *    *    *    *    *    *    *    *    *    *    *    *    *    5.
 15     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    3.
 16     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    1.
 17     *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    1.
 18     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    9    *    9   10    3.
 19    11   11   11                                                                *    *    *    *    *    *    *    *    *    4.
 20     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 21     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    2.
 22     *    *    *    *    *    *    *    *    *    *                             *    *    *    *    *    *    *    *    *    3.
 23     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    6.
 24     *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    6.
 25     *    *    *    *    *    *    *    *    *    *    *    *    *    *             10   12   17    *    *    *    *    9    7.
 26     9    9    *    9   10    *    9   10   10   13   13    *   10    *    *        24   12    *   12    *    *    9   11   10.
 27    14   11   12    *   11    *   11   11    *   15   14   10    *    9             21   21   23   24   25   28   28   25   16.
 28    23   27   28   31   35   39 [illegible] 37 43  43   34   43   19   21   34   30   27   27   29   23   31   30   32   21   32.
 29    23   25   31   25   27   32   32   36   33   41   54   43   22   29   30   27   27   21   20   27   21   19   31   31   30.
 30    25   24   31   25   24   25   25   30   26   37   41   38    *   14   19   18   15                                       25.

MEAN    7.   7.   7.   6.   7.   7.   7.   7.   7.   9.   9.   8.   4.   5.   7.   5.   7.   6.   6.   6.   6.   6.   7.   7.

                      TOTAL NUMBER OF OBSERVATIONS =  7923     MEAN  =     7.

             * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                       DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
                     TRAILER NO. - 20  PERIOD(11/ 1/74 TO 11/30/74)

                                             HOUR
         1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 ME
DAY

  1      *    *    *   12   14   12    *   10    *   10    *    *    *    *   23         *    *    *    *    *    *    *    *   5
  2      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
  3      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   2
  4      *    *    *    *    *    *    *    *    *    *    *    *                                                            *   0
  5      *    *    *    *    *    *    *    *    *    *    *                   *    *    *    *    *    *    *    *    *    *   0
  6      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *   2
  7      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
  8      *    *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *   0
  9      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 10      *    *    *   42   36   40   44   40   39   37   22   12   17   21   23   25   26   24   29   27   28   32   29   30  26
 11     32   35   41   20   19   22   20   19   21   18   20    *    *    *    *    *    *    *    *    *    *    *    *    *  12
 12      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 13      *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *   0
 14      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 15      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   2
 16      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 17      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 18      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 19                                                                        *    *    *    *    *    *    *    *    *        0
 20      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 21      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 22      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 23      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   2
 24      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   2
 25      *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *   2
 26      *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *   4
 27      *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    *    *   0
 28      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 29      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0
 30      *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *   0

MEAN    2.   2.   2.   2.   3.   3.   3.   3.   3.   3.   2.   1.   1.   1.   2.   1.   1.   1.   1.   1.   1.   1.   2.   1.

                    TOTAL NUMBER OF OBSERVATIONS =  8092    MEAN  =    2.

         * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	14	13	18	[illegible]	18	13	16	19	20	19	14	17	16	17	18	18	20	20	17	13	15	15.
11	15	14	16	*	*	*	*	*	*	*	*	9	*		20				13	15		17		17	10.
12	25	26	20	25	24	27	25	25	25	24	22			16	15	16	20	22	24	21	24	19	19	21	23.
13	21	21	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	3.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
17	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	1.
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
19	*	*	*													*	*	*	*	*	*	*	*	*	1.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*						*	*	*	*	*	*	*	*	*	1.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	9	3.
26	9	9	*	9	10	*	*	10	10	13	13	*	10	*	*		*	*	*	*	*	*	*	*	7.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	10	12	14	16	15	13	6.
28	12	15	15	17	19	24	25	25	32	29	24	28	10	14	20	17	15	16	19	15	22	22	23	14	20.
29	17	13	24	22	21	25	20	29	26	30	37	26	*	11	14	13	13	11	12	16	13	13	21	20	20.
30	17	15	20	17	10	16	18	19	17	22	24	18	*	*	*	*	*								15.
MEAN	5.	5.	5.	4.	5.	5.	5.	5.	5.	6.	6.	5.	2.	3.	4.	3.	3.	3.	4.	4.	4.	4.	4.	4.	

TOTAL NUMBER OF OBSERVATIONS = 7910 MEAN = 4.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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              DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
               TRAILER NO. - 20  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 ME
DAY

  1      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *
  2      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  3      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  4      *   *   *   *   *   *   *   *   *   *   *   *                                               *
  5      *   *   *   *   *   *   *   *   *   *   *               *   *   *   *   *   *   *   *   *   *
  6      *   *   *   *   9   9   9   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *
  7      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  8      *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *  11   *   *   *
  9      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  11  11  13
 10 [illegible] *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 11      *   *   *  13  10   *   *  10   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 12      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 13      *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *
 14      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 15      *   *   *   *   *   *   *   9   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 16      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 17      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 18      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 19                                                              *   *   *   *   *   *   *   *   *
 20      *   *   *   *  11  10   9   9   9   *   9   *   *   *   *   *   *   *   *   *   *   *   *   *  4
 21      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  1
 22      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  2
 23      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  2
 24      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  2
 25      *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   9  2
 26      *   *   *   *   *   *   *   *   *   *   *   *   *       *  10  11  16  18  19  19  20  25  26  9
 27     27  15  17  13  26  19  19  18  18  17  18       *   *   *   *   *   *   *   *   *   *   *   * 12
 28      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  5
 29      9   6  12  10   9   9  11  11  14  14   *   *   *   *   *   *   *  11   *   *   *   *   *   *  7
 30      *   *   *   *   *   *   *  11  13   9   9   *   *   *   *   *   *   *   *   9   *   *   *   *  7

MEAN    4.  3.  3.  3.  4.  4.  4.  4.  4.  3.  3.  1.  1.  1.  1.  1.  1.  2.  3.  3.  3.  3.  4.  4.

                   TOTAL NUMBER OF OBSERVATIONS =  8094    MEAN  =    3.

          * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                       DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
                        TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                         HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
  2      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
  3      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
  4      *   *   *   *   *   *   *   *   *   *   *   *   *   *           *   *   *   *   *   *   *   *   0
  5      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   1
  6      *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   1
  7      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
  8      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
  9      *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *   0
 10      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
 11      *   *   *   *   *   *   *   *   *   *   *   *   *       *               *   *       *       *   0
 12      *   *   *   *   *   *   *   *   *   *   *           *   *   *   *   *   *   *   *   *   *   *   0
 13      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   0
 14      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   3
 15      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   1
 16      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0
 17      *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   0
 18      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   2
 19      *   *   *                                               *   *   *   *   *   *   *   *   *   3
 20      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   2
 21      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   2
 22      *   *   *   *   *   *   *   *   *   *                       *   *   *   *   *   *   *   *   *   2
 23      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   3
 24      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   4
 25      *   *   *   *   *   *   *   *   *   *   *   *   *   *          10  11  11   *   *   *   *   *   4
 26      *   *   *   *   *   *   *   *   *   *   *   *   *   *   *      23  11   *  11   *   *   *   *   4
 27     11   9  10   *   *   *   *   9   *  11  10   9   *   9          12  12  13  11  10  11  13  12  10
 28     11  11  11  14  15  15  14  11  10  13  10  15   *   *  13  12  11  11   9   *   9   *   9   *  11
 29      *   *   *   *   *   *   *   *   *  10  16  17  17  17  16  14  13  10   *  10   *   *   9  11  10
 30      *   *  10   *   *   *   *  11   *  14  17  20   *   *  11  11   9                               11

MEAN    2.  2.  2.  2.  2.  2.  2.  2.  2.  3.  3.  3.  2.  2.  3.  2.  4.  3.  2.  2.  2.  2.  2.  2.

                  TOTAL NUMBER OF OBSERVATIONS =  7999    MEAN  =    2.

           * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                    DIURNAL VARIATION OF  FUR DIOXIDE(UG/M**3)
                     TRAILER NO. - 20  PERIOD(11/ 1/74 TO 11/30/74)

                                          HOUR
      1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   0.
  2   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  3   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  4   *   *   *   *   *   *   *   *   *   *   *   *           *   *   *   *   *   *   *   *   *   *   0.
  5   *   *   *   *   *   *   *   *   *   *   *       *   *       *   *   *   *   *   *   *   *   *   0.
  6   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  7   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
  8   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   0.
  9   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 10
 11                   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 12   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 13   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   0.
 14   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 15   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 16   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 17   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 18   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 19                                                           *   *   *   *   *   *   *   *   *       0.
 20   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 21   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 22   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 23   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 24   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 25   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 26   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   0.
 27   *   *   *   *   *   *       *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   0.
 28   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 29   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.
 30   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   0.

MEAN  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

               TOTAL NUMBER OF OBSERVATIONS =  7911     MEAN  =    0.

         * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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CORPORATION

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                             DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                              TRAILER NO. - 21  PERIOD(11/ 1/74 TO 11/30/74)

                                                HOUR
          1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 MEAN
DAY

  1      30   31   25    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    4.
  2       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  3       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  4       *    *    *    *    *    *    *    *    *    *    *    *    *    *                                                      0.
  5                                                                                *    *    *    *    *    *                    0.
  6                                                                      *    *    *    *    *    *    *    *    *    *    *    *    0.
  7       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  8       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
  9       *    *    *    *    *    *    *    *    *    *    *                                                                 0.
 10                                                                      *    *    *    *    *    *    *    *    *    *    *    *    0.
 11       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 12       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 13       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    0.
 14       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 15       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 16       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 17       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 18       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 19       *    *    *    *    *    *    *    *    *    *    *    *    *         *    *    *    *    *    *    *    *    *    *    0.
 20       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 21       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 22       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 23       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 24       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.
 25       *    *    *    *    *    *    *    *    *    *    *    *    *    *                                                      0.
 26      17   22   23   24   21   25   24   25   22   23   23   22   25   26    *    *   15    *    *    *    *    *    *    *   18.
 27       *    *    *   13    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    7.
 28       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    4.
 29       *    *    *    *    *    *    *    *    *    *    *                                                                 0.
 30       *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    *    0.

MEAN     2.   3.   2.   2.   1.   1.   1.   1.   1.   1.   1.   2.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.   1.

                          TOTAL NUMBER OF OBSERVATIONS =  7476    MEAN  =     1.

              * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                    DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
                      TRAILER NO. - 22  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
DAY      1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 ME

 1       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 2       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 3                                           *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 4       *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *
 5       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 6       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  13   *   *   *   *   *   *
 7       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 8       *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *
 9       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
10       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
11       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
12       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
13       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
14       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
15       *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *
16       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
17       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
18       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *
19       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
20       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
21       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
22       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
23       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
24       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
25       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
26       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
27       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
28       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
29       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
30       *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *

MEAN    3.  3.  3.  3.  3.  3.  3.  3.  3.  3.  3.  2.  2.  2.  2.  2.  3.  3.  3.  3.  3.  3.  3.  3.

                TOTAL NUMBER OF OBSERVATIONS =  8291     MEAN  =     3.

        * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	
7	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
9	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	
10																									
11																									
12																									
13																									
14															*	*	*	*	*	*	*	*	*	*	
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	
19	*	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	
20	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22	*	*	*	*	*	*	*	*	*	*						*	*	*	*	*	*	*	*	*	
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*		*	*	*	*	*	
29	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*								
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 6863 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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             DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
              TRAILER NO. - 24  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
DAY    1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24

  1    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  2                                                    *   *   *   *   *   *   *   *   *   *   *   *
  3    *   *   *   *   *   *   *   *   *   *   *   *
  4                                                                        *   *   *   *   *   *   *
  5    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  6    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  7    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  8    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
  9    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 10    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 11    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 12    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 13    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 14    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 15    *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *
 16    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 17    *   *   *   *   *   *   *   *   *   *   *   *   *
 18                                                    *   *   *   *   *   *   *   *   *   *   *   *
 19    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *
 20    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 21    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 22    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 23    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 24    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 25    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 26                                                                        *   *   *   *   *   *   *
 27    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 28    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 29    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *
 30    *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *

MEAN  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

              TOTAL NUMBER OF OBSERVATIONS =  7418    MEAN  =    0.

         * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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CORPORATION

DIURNAL VARIATION OF DROGEN SULFIDE(UG/M**3)
TRAILER NO. - 22 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
4	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	
5	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10	9	7	*	
10	*	*	*																						
11													*	*	*	*	*	*	*	*	*	*	*	*	
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
13	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19															*	*	*	*	*	*	*	*	*		
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
26	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	
27	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 7669 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF H[illegible]ROGEN SULFIDE(UG/M**3)
TRAILER NO. - 21 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	*	*	*														*	*	*	*	*	*	*	*	0
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3	*	*	*															*	*	*	*	*	*	*	0
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0
5																									
6													*	*	*	*	*	*	*	*	*	*	*	*	1
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
15	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0
18	*	40	41	21	44	26	*	13	*	*	17	*	18	22	27	*	*	*	*	*	*	*	*	*	12.
19	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	13	32	12	11	*	*	10	8	*	*	9	7	38	30	24	36	43	36	26	8	22	16.
21																									
22																									
23																									
24													*	*	*	*	*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*												0.
28												*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*														0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	1.	2.	2.	2.	4.	2.	1.	1.	1.	1.	1.	0.	1.	2.	2.	2.	2.	1.	2.	2.	2.	2.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 6110 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

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                              DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
                                TRAILER NO. - 22  PERIOD(11/ 1/74 TO 11/30/74)

                                                  HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  1
  2     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                                  1
  3                                         *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  1
  4     *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *  0
  5     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  6     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  7     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  8     *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *  0
  9     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 10     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 11     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 12     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 13     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 14     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 15     *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *   *   *  0
 16     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 17     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 18     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *  0
 19     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 20     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 21     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 22     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 23     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 24     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 25     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 26     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 27     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 28     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 29     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 30     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *      1

 MEAN  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

                       TOTAL NUMBER OF OBSERVATIONS =  8291    MEAN  =    0.

                * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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DIURNAL VARIATION OF DROGEN SULFIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
9	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
11	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	
12	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	
13	*	*	*																						
14															*	*	*	*	*	*	*	*	*	*	
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
19	*	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
22	*	*	*	*	*	*	*	*	*	*						*	*	*	*	*	*	*	*	*	
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
24	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*								
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 7809 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

```
                       DIURNAL VARIATION OF [illegible]ROGEN SULFIDE(UG/M**3)
                          TRAILER NO. - 24  PERIOD(11/ 1/74 TO 11/30/74)

                                               HOUR
DAY     1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 ME

  1     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *                         0
  2                                                     *   *   *   *   *   *   *   *   *   *   *   *  0
  3     *   *   *   *   *   *   *   *   *   *   *   *                                                 0
  4                                                                         *   *   *   *   *   *   *  0
  5     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   8   *   *   *   *   *   *   *  0
  6     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  7     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  8     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
  9     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 10     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 11     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 12     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 13     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 14     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 15     *   *   *   *   *   *   *   *   *   *   *   *       *   *   *   *   *   *   *   *   *   *   *  0
 16     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 17     *   *   *   *   *   *   *   *   *   *   *   *   *                                             0
 18                                                     *   *   *   *   *   *   *   *   *   *   *   *  0
 19     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 20     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 21     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 22     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 23     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 24     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 25     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 26     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 27     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 28     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 29     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0
 30     *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *   *  0

MEAN   0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

                   TOTAL NUMBER OF OBSERVATIONS =  7734    MEAN  =    0.

            * DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT
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                 DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
                       TRAILER NO. - 20  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 ME
DAY

  1     5   8   8
  2
  3
  4
  5                                                                8   8   8
  6                                                                        8   8
  7     8   9   9   9   9  10  10   9   9   9   8   8   8   6   8   8   8   8   9   9   9   9   9   9
  8     9   9   9   9   9   9   9   8   8   8   8   8   8   8       9   9   9   9   9   9   9   9   9
  9     9   9   9   9   9   9   9   9   9   9   9   9   9   8   5
 10
 11
 12
 13
 14                                                    9   9   9   9   9   9   9   9   9   9   9   9
 15     9   9   9   9   8   8   8   9   8   8   8   8   8   8   8   8   8   8   9   9   9   9   9   9
 16     9   9   9   9   8   8   8   8   6   8   8   8   8   8   8   8   8   9   9   9   9   9   9   8
 17     9   8   8   8   8   8   8   8   8   8  10   8   8   8   6   6   3   6   8   8   8   8   8   8
 18     6   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8   8
 19                                                            8   8   8   8   9   9   9   9   9
 20     8   8   8       8   8                                          8   9   8   8   8   8   8   8
 21     8   8   8   8   8   6   8   8   8   8   8   8   8   8   8   6   8   8                       8
 22     8                                       8   8   8   8   6   8   8   8   8   8   8   8   8   8
 23     8   8   8   8   8   6   9   9   9   9   9   8   8   8   8   8   8   9   9   9   8   9   9   9
 24     9   8   8   8   9   9   9   9   9   9   9   9   9   9   9   9  10  10  10  10  10  10  10  10
 25    10  10   9   9   9   9   9   9   9   9   9   9       9   9   9   9   9  10  10  10  10  10  10
 26    10  10   9   9   9   9   9   9   9   9   9   9   9      10   9  10  10  10  10  10  10  10  10  1
 27     9   9   9   9  10   9   9   9   9   9   8       8   8   8   8   8   8   8   8   9   9   9   8
 28     8   9   9   9   8   8   8   9   8   8   8   8   8   8   8   8   8   8   8   8   8   8   9   8
 29     6   9   9   9   8   9   6   8   8   8   8   5   6   6   5   5   6   6   6   6   7   6   6   6
 30     6   6   6   6   6   6   6   5   6   6   6       5   5   5   5   5   6   6   6   6   6   6   6

 MEAN  9.  9.  9.  9.  9.  9.  9.  9.  9.  8.  8.  8.  8.  8.  8.  8.  8.  8.  9.  9.  9.  9.  9.  9.

                    TOTAL NUMBER OF OBSERVATIONS =  4912    MEAN  =    9.
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                            DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
                                   TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                                  HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

  1
  2                                                                        77  81  79 100  99 133 102   96
  3  115 135 119 110  73 101  70  91 102  97 104 123 148 147 114 115 138 134 122 129 114 105 118       115
  4  130 122 123  91  87 121  79 106  95 118 101 141 136 132                                     134   114
  5
  6                                                              50  71      86  77  98  54  98  50   73
  7   78  92  54  50  46  83  90 108 112  81 111  95     104 136 137  98  95 104  78  90  72 106  59   91
  8   53  62  94 106  60  59  93  74  63  83 114  65  89 137 108 111 120 115  84 114 116  77 110 121   96
  9                                          126  64 103 101  96  99 100  81  86  93  78 116  67   94
 10  102  98 111                                                                                      101
 11                                      144 145 145 145 145 145 145 145 145 145 145 145 145 145 145  145
 12                                                  145 145 145 145 145                              145
 13
 14
 15                                                   45  56 111 130 127 113 133  79 105 107  98      101
 16  101  67  78  73  94 108  99  62 114  86 136 132 127 120 127 125 102 112  86 100 105  89  93 104  102
 17   85  73  95  78  65  88  84  75 111 144 103  81  56  71  85 125 128  89  62  90  82 104  91       93
 18                                                          64  73  86  89  88                        81
 19                                                              149 134  68  90  68 100  82  70  94   97
 20  121  81  71  84  74  51  79  90  93  79 131  75  62  47  71  97  80 117  74 105  85  62 107  97   84
 21  110  77  57  64  66  63  74 106  92  94  74  74  83 107 121 137 122  98 111 170 195 160 144 183  108
 22  114 133 134 188 159 182 155 164 160 142                     161 133 193 146 206 268 151 160 207  168
 23  226 215 197 172 215 210 167 149 207 248 226 242  94 139 253 259 157 175 110 151 153 170 157 131  186
 24  149 115 185 142 144 132 152 146 143 220 209 173 153 142 191 272 191 166 174 156 200 208 140 130  171
 25
 26   68  75  67  89  66  68  75  87  78 109  90  88 125 145 132      60  67  65  55  64  58  76  65   83
 27   47  52  55  53  71  57  67  56  41  86  72  88  62  68          59  59  71  90  62  56  74  59   65
 28   55  62  93  58  63  79 113  93 101  86  60 134  49  58  81  88  71  52  89  53  80  73  91  69   76
 29   51  44  77  65  68  62  61  68  58  87  98 128  75  84  86  77  90  70  75  86  81  56  68  66   75
 30   63  61  73  74  64  60  53  72  84  85 108 113  29  31  49  72  57                               68

MEAN 101. 93.103. 94. 95. 97. 97. 99.104.116.118.120. 95.105.118.129.112.108.100.106.117.101.110.105.

                              TOTAL NUMBER OF OBSERVATIONS =  5142     MEAN  =  105.
```

DIURNAL VARIATION OF [illegible]THANE (UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	8	9	8																					
2																								
3																								
4																								
5																7	8	8						
6																		8	8					
7	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	8	8	7	8	8	8
8	8	8	8	8	8	8	8	7	7	7	7	7	7	7		8	8	8	8	8	9	8	8	8
9	8	9	9	9	9	8	8	9	8	8	8	8	8	7	1									
10																								
11																								
12																								
13																								
14													7	8	8	7	7	8	8	8	8	8	9	8
15	9	9	9	9	8	8	8	9	8	8	8	7	7	7	7	7	7	7	8	8	8	8	9	8
16	9	8	8	8	8	8	9	8	8	7	7	7	7	7	7	7	7	8	8	8	8	8	9	8
17	8	8	8	8	8	8	8	8	8	7	7	7	7	7	7	7	7	7	8	8	8	8	8	8
18	8	8	8	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	7	8	8	8	8
19															7	8	8	8	8	9	8	8	9	
20	8	8	8		7	8											7	8	8	8	8	8	8	8
21	9	8	8	8	8	8	8	8	8	8	8	7	7	7	7	7	8	8						8
22	8										7	8	8	8	8	7	8	8	8	8	8	8	8	8
23	8	8	8	8	8	8	8	8	9	8	8	8	8	8	8	6	7	8	8	8	8	8	8	8
24	8	8	8	6	8	8	8	8	8	8	8	7	7	7	7	6	6	7	7	7	7	7	7	7
25	7	7	7	7	8	7	7	7	7	7	6	6		8	8	8	8	8	8	8	8	9	9	9
26	9	8	8	8	8	8	8	8	8	7	7	7	7		8	8	8	8	8	8	9	9	8	8
27	8	8	8	6	8	8	6	8	8	8	8		8	7	7	7	7	7	8	8	8	8	9	8
28	8	8	8	8	8	8	6	8	8	8	8	8	8	8	8	8	8	7	8	8	8	8	8	8
29	8	8	8	8	8	8	8	8	8	8	7	5	6	5	5	5	6	6	6	6	7	6	6	6
30	5	6	6	6	6	6	5	6	6	5	6		5	5	5	5	5	6	6	6	6	6	6	6
MEAN	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	8.	7.	7.	7.	7.	7.	7.	8.	8.	8.	8.	8.	8.	8.

TOTAL NUMBER OF OBSERVATIONS = 4905 MEAN = 8.

DIURNAL VARIATION OF HANE (UG/M**3 X 10**-2)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																		8	7	8	8	8	8	8	8.
3	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		8.
4	8	8	8	8	8	8	8	8	8	8	8	8	8	8										8	8.
5																									
6																9	9		9	9	9	9	9	9	9.
7	9	9	9	9	9	9	9	9	9	9	9	9		9	9	9	9	9	9	8	8	9	9	9	9.
8	9	9	9	9	9	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9.
9												9	10	9	9	9	9	8	9	8	9	8	9	9	9.
10	9	9	9																						9.
11										142	144	145	144	145	145	145	145	145	145	145	145	145	145	145	145.
12													145	145	144	145	145								145.
13																									
14																									
15													7	8	8	7	7	8	8	8	7	7	7		8.
16	8	7	8	8	8	7	8	7	7	7	7	7	8	7	8	8	8	8	8	7	8	8	8	8	8.
17	8	8	8	7	8	8	8	8	8	8	8	8	8	8	8	7	8	8	6	7	8	8	8		8.
18															8	8	8	8	8						8.
19																8	8	8	8	8	7	8	8	8	8.
20	8	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	7	7	8	8	8	8	8.
21	8	8	7	8	8	8	8	8	7	8	8	8	7	8	8	7	8	6	6	6	6	6	6	6	7.
22	6	6	7	5	6	6	6	5	6	6						6	6	6	6	6	6	6	6	6	6.
23	6	6	6	6	6	6	6	5	6	6	6	7	7	7	7	6	7	6	7	6	6	6	6	6	7.
24	5	5	6	6	7	6	6	6	6	6	5	6	6	6	6	6	6	6	6	6	6	6	6	5	7.
25																									
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		9	8	8	8	8	8	8	8	5.
27	7	7	7	8	7	7	7	7	7	7	7	7	7	7			9	8	8	9	8	8	9	9	8.
28	8	8	9	9	9	9	9	9	9	8	8	8	9	8	8	8	9	8	8	8	9	8	9	9	9.
29																									
30	8	8	8	8	8	8	8	8	8	8	7	8	8	8	8	8	8								8.
MEAN	5.	3.	8.	8.	5.	5.	5.	8.	8.	16.	16.	17.	24.	23.	24.	23.	22.	15.	15.	15.	15.	15.	15.	16.	

TOTAL NUMBER OF OBSERVATIONS = 4859 MEAN = 15.

```
           DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
                  TRAILER NO. - 26  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEAN
DAY

 1     0   0   0                                                                                    0
 2
 3
 4
 5                                                                 0   0   0                        0
 6                                                                         0   0                    0
 7     0   0   1   1   1   2   2   1   1   1   1   1   1   1   0   0   0   0   0   1   1   0   0   0   1
 8     0   0   0   0   0   0   0   0   0   0   0   0   0   0       0   0   0   0   0   0   0   0   0   0
 9     0   0   0   0   0   0   0   0   0   0   0   0   0   0   4                                        0
10
11
12
13
14                                                     1   0   1   0   0   0   0   0   0   0   0   0   1
15     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
16     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
17     0   0   0   0   0   0   0   0   0   0   2   0   0   0   0   0   0   0   0   0   0   0   0   0   0
18     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
19                                                             0   0   0   0   0   0   0   0   0       0
20     0   0   0       0   0                                           0   0   0   0   0   0   0   0   0
21     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0                       0   0
22     0                                       0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
23     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
24     0   0   0   0   0   0   0   0   0   0   1   0   1   1   2   2   3   3   3   3   3   3   3   2   1
25     2   2   1   1   1   1   1   1   1   2   2   2       1   0   0   1   1   1   1   0   0   0   0   1
26     0   1   1   1   1   1   1   1   1   1   1   1   1       1   0   1   1   1   1   0   0   1   1   1
27     0   1   1   1   1   1   1   1   1   0   0       0   0   0   0   0   0   0   0   0   0   0   0   0
28     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
29     0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
30     0   0   0   0   0   0   0   0   0   0   0       0   0   0   0   0   0   0   0   0   0   0   0   0

 MEAN  0.  0.  0.  0.  0.  0.   .  0.  0.  0.  1.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

                     TOTAL NUMBER OF OBSERVATIONS =  4905    MEAN  =    0.
```

DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																		68	72	71	91	90	125	94	88.
3	112	126	111	102	65	92	60	83	94	89	95	114	140	138	106	106	129	125	114	120	105	97	109		107.
4	122	114	115	72	78	113	71	97	85	109	93	132	128	123										126	106.
5																									
6																41	61		76	68	88	44	89	41	64.
7	69	82	55	49	37	74	60	98	102	72	101	85		94	126	128	89	86	95	69	81	60	96	50	82.
8	49	52	85	36	89	43	93	65	53	73	105	55	80	125	99	102	111	105	74	104	107	68	101	112	86.
9												115	54	93	91	86	89	91	71	78	84	69	107	58	84.
10	92	78	102																						91.
11										1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
12													0	0	0	0	0								0.
13																									
14																									
15													37	48	103	122	118	105	125	71	97	99	90		93.
16	93	59	73	70	56	100	82	54	106	77	128	123	119	112	119	117	94	103	78	92	97	81	85	96	94.
17	78	79	86	74	86	79	75	60	103	136	94	72	47	63	78	117	120	81	74	82	73	96	83		84.
18															56	65	78	81	79						72.
19																141	126	79	82	59	92	73	62	85	89.
20	93	73	53	71	66	42	71	82	64	76	123	67	54	39	63	88	71	109	66	96	76	54	98	88	76.
21	131	53	45	56	52	54	69	97	83	85	65	65	74	98	113	129	113	91	104	163	188	154	138	176	100.
22	111	125	127	181	162	176	148	157	153	135						154	126	186	139	199	261	144	153	201	151.
23	222	212	197	154	208	211	[illegible]	133	200	241	218	235	86	131	245	252	160	168	103	143	146	163	150	124	179.
24	161	129	173	155	137	125	154	139	136	213	201	166	146	135	184	265	184	158	167	149	193	201	133	124	164.
25																									
26	54	72	64	85	83	64	72	84	74	105	87	84	121	141	129		49	57	56	47	55	50	58	57	77.
27	39	54	57	42	63	43	56	46	33	73	64	80	54	66			50	49	61	81	53	47	64	49	56.
28	45	53	73	48	54	74	104	79	92	77	51	121	40	49	72	79	62	43	80	43	71	64	81	60	67.
29																									
30	55	53	65	66	52	52	44	63	76	77	100	104	20	22	41	63	48								59.
MEAN	95.	88.	93.	88.	73.	91.	91.	90.	99.	102.	103.	103.	71.	82.	95.	108.	91.	95.	86.	92.	104.	87.	97.	91.	

TOTAL NUMBER OF OBSERVATIONS = 4859 MEAN = 93.

CORPORATION

DIURNAL VARIATION OF CARBON MONOXIDE(UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

AY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	7	7	7																						8
2																									
3																									
4																									
5																8	8	8	8	8	8	8	8	9	8
6	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
7	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	9	9	9	9	9	9	9	9	9	9
8	9	9	9	9	9	9	9	9	9	9	9	9	9	9		9	9	9	9	9	9	9	9	9	9
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	6	1									8
													13	12	8	7	7	7	6	6	6	5	5	5	7
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	4	4
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	7	3	3	3	3	3	3	[illegible]
	3	3	3	3	3	2	2	3	2	2	5	2	2	2	2	2	4	4	4	4	4	4	4	4	3
															4	4	4	4	4	4	4	4	4		4
	4	4	4														4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	[illegible]	4	4	4	4	4		4	4	4	4	4	4	4	5	4	4	4	4
	4	4	4	4	4	4	4	4	5	5	4	4	4		4		4	5	4	5	5	4	4	5	5
	4	4	4	4	4	4	4	4	5	4	4		4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	4	4	4	4	3	4	[illegible]	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	4
	3	3	3	3	3	3	3	3	3	3	3		3	3	3	3	3	3	3	3	3	3	3	3	3
EAN	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	

TOTAL NUMBER OF OBSERVATIONS = 5477   MEAN = 5.

```
                  DIURNAL VARIATION OF C[illegible]ON MONOXIDE(UG/M**3 X 10**-2)
                     TRAILER NO. - 23   PERIOD(11/ 1/74 TO 11/30/74)

                                            HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
 Y

      26  26  27  26  25  26  25  29  26  24  28  26  27  28  27  27  27                              27
                                                                          4   5   6   6   7   8   8   7
       9   9   9   9   9   9   9   9  10   9  10   9  12  12  11  11  11  11  11  11  12  10  11  12   1
      11  11  12  11  10  11  10  11  11  12  11  11  11  11          27  29  28  50  30  27  29  12   1
      28  29  29  29  29  29  28  30  28  31  31  33  32  34  30  32  44  28  28  28  28  28  28  31   3
      29  30  30  29  32  30  29  29  31  31  34  30  30  29      27  27  28  27  28  30  29  28  28   3
      28  29  28  23  30  28  27  32  31  30  31  30      26  23  28  27  28  29  28  28  28  29  27   2
      26  27  27  29  28  28  29  28  26  29  29  28  27  28  28  29  30  29  29  30  30  29  31  31   2
      34  29  30  31  32  31  29  31  32  32      34  30  30  31  31  31  31  30  31  32  31  31  30   3
      32  30  30                                                                                      3
 1
 2
 3
 4                                                            145 144 143 141 140 139 136 135 134  14
 5   132 132 131 129 127 126 125 123  84  94 102 104                                                 11
 6   102 101 100 101 101 100  99  97  96  97  97  95  95  94  94  93  92  93  91  90  92  91  91  96   9
 7    91 [illegible] [illegible] [illegible] 89  88  84  88  87  88  86  86  84  86  85  85  87  84  84  83  84  83  84  86   8
 8    84  83  82  81  80  79  79  79  78  78  78              33  30  28  26  26  24  24  22  19  19   5
 9    18  20  19                                                  28  29  29  30  27  30  27  29  30  27
      30  25  28  29  28  23  32  20  28  29  31  27  25  23  24  25  25  27  25  27  25  26  23  29  28
 1    25  26  28  25  26  26  25  27  28  27  26  25  26  27  27  27  29  23  23  24  24  24  24  24  27
 2    23  24  23  24  25  26  25  23  25  25                          23  23  23  24  25  26  26  24  27  25
13    28  27  25  25  25  26  26  26  28  30  29  33  26  29  28  32  29  27  27  27  28  27  27  28  28
24    29  27  28  27  28  25  25  27  30  29  27  25  24  24  24  28  27  27  26  24  26  28  28  21  27
25    12  13  13  13  13  13  13  13  12  13  14  12                  10  11  12  12  12  13  37  16  14
26    14  15  13  13  14  13  13  12  14  15  14  12  15  15  13      34  31  30  27  28  33  33  30  20
27    29  29  27  28  28  28  25  27  27  29  29  29  26  27          27  29  28  31  28  28  29  27  29
28    26  29  31  29  29  29  32  31  33  31  29  34  28  23  27  30  29  28  30  29  30  30  29  29   3
29    29  29  32  29  31  34  30  29  29  33  32  35  31  32  29  31  32  31  27  27  30  30  29  33  31
30    32  29  32  32  34  34  30  30  32  31  33  32  29  25  28  29  28                              32

MEAN 37. 37. 37. 38. 38. 36. [illegible]. 38. 37. 38. 38. 35. 33. 33. 34. 37. 38. 36. 35. 36. 36. 36. 37. 36.

                  TOTAL NUMBER OF OBSERVATIONS =  6359    MEAN  =   37.
```

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	22	21	19	*	2	4	9	11	14	15	28	31	33	36	38		48	41	40	36	36	31	38	29	2
2	22	19	13	16	22	21	14	15	19	36	52	53	54	52	52	53	54	47	41	39	32	29	26	25	3
3	26	25	23	21	21	22	21	21	22	23	24	27	30	28	28	29	33	33	29	28	27	29	24	25	2
4	33	28	31	26	32	30	26	24	28	35	41	44													32
5															45	45	39	28	19	15	10	14	14	16	2
6	13	16	17	14	8	7	4	8	10	28	42	46	46	47	47	47		37	26	21	21	19	20	18	2
7	23	22	21	22	24	17	17	21	27	35	48	50	49	47	47	48	47	31	15	23	27	22	15	14	2
8	23	25	27	27	26	25	22	29	31	36	48	49	48	47		45	43	31	21	12	7	17	16	16	2
9	15	14	22	19	13	15	24	16	17	24	32	33	36	39	41	31	31	23	16	17	9	14	18	15	2
10	17	19	22	*	*	*	2	11	11	19	22	22	23	23	22	20	13	2	4	1	1	7	2	*	1
11	*	*	*	*	*	*	3	4	11	17	26	39	45	45	45	44	36	20	22	22	24	25	25	24	2
12	25	24	23	25	26	28	3	31	31	35	43	45	45	44	43	41	39	38	39	40	34	30	28	31	3
13	34	32	33	31	29	27	25	25	23	27	35	39	39		43	42	36	28	20	9	9	12	9	9	27
14	15	14	16	17	19	20	21	21	24	29	40	45	46	46	45	41	38	32	30	29	28	27	25	27	2
15	11	13	14	15	13	19	14	11	23	37	40	41	41	43	40	39	36	23	15	11	16	11	11	26	2
16	12	13	15	15	16	15	15	16	20	26	38	41	44	45	46	45	33	24	24	25	22	16	19	21	2
17	24	22	24	25	24	24	27	26	27	31	41	45	44	43	43	44	43	29	16	24	27	30	30	29	3
18	29	25	24	29	34	35	35	38	39	39	39	43	39	41	42	42	40	28	25	35	30	28	25	25	3
19															44	43	38	28	18	24	23	25	26		30
20	23	24	25	3	*	*	*	*	2	7	17	18	18	17	16	19	36	26	28	30	28	31	31	30	19
21	23	32	31	27	30	31	31	32	33	35	47	48	47	46	45	44	37	25	23	27	27	26	21	34	3
22	34	34	29	25	15	12	22	30	25	39	41	42	43	44	46	47	44	37	32	34	40	36	42	41	3
23	42	39	4	42	37	32	24	23	23	27	34	37	44	45	46	44	30	26	27	29	23	22	21	26	33
24	29	3	29	25	23	24	23	28	32	34	37	44	47	47	46	43	39	25	23	24	27	27	30	3	32
25	31	30	32	32	32	32	33	35	34	40	45	44	46	46	47	48	47	42	32	25	20	22	20	14	35
26	19	24	27	23	27	27	25	24	29	36	49	51	53		54	53	43	32	32	30	28	27	26	25	34
27	33	31	33	34	27	31	36	30	41	45	53		55	54	53	52	45	33	32	33	30	24	24	46	39
28	43	41	41	33	34	35	31	31	31	35	40	43	44	45	46	47	47	48	46	43	40	33	31	30	40
29	23	27	27	27	29	27	25	34	32	35	42	50	50	52	51	50	38	29	35	33	32	33	32	31	36
30	31	32	27	31	32	32	31	25	31	41	35	43	53	52	52	49	38	3	31	33	31	33	33	35	37
MEAN	24.	25.	25.	23.	22.	22.	22.	23.	25.	32.	39.	42.	43.	43.	44.	43.	39.	31.	27.	26.	25.	25.	24.	25.	

TOTAL NUMBER OF OBSERVATIONS = 7974 MEAN = 30.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1																		9	8	8	8	8	8	8	
2	7	5	7	7	7	6	7	7	8	9	10	10	10	11	11	8	3	4	5	5	4	4	4	3	
3	4	2	3	2	2	2	2	2	3	3	2	3	6	7	6	6	7	7	8	7	8	8	7		
4	8	8	8	8	8	7	6	7	7	8	10	11	11	11										7	
5																									
6																16	15		13	12	12	12	12	12	1
7	11	12	12	14	13	12	12	10	10	16	19	18	24	22	23	23	23	19	18	17	17	18	18	18	1
8	17	17	17	17	18	17	13	14	15	19	21	25	22	24	18	17	15	13	14	13	12	13	12	11	1
9												14	15	14	15	14	12	13	11	11	11	11	11	11	1
10	11	11	11																						1
11																									
12																									
13																									
14															22	22									2
15	15	14	13	13	14	14	13	13	12	13	15	17	7	9	13	12	11	11	12	12	12	11	12	13	1
16	12	12	13	12	9	12	14	13	9	11	15	16	14	16	15	14	14	17	16	13	13	15	16	14	1
17	15	17	15	15	16	16	14	15	12	14	24	20	24	23	21	23	20	18	17	19	17	14	20	23	1
18	14	25	24	25	25	28	29	28	29	30	31	29	28	32	32	30	27	29							2
19																17	18	18	19	18	15	16	17	17	1
20	17	21	2	18	19	22	21	20	20	21	25	26	29	26	25	26	21	20	18	19	19	19	19	20	2
21	21	21	20	19	19	18	19	19	19	25	30	32	31	30	30	27	19	19	18	17	19	19	18	22	2
22	27	22	20	17	16	15	17	18	17	19						28	27	22	21	18	14	15	16	15	2
23	17	19	18	14	16	17	16	16	15	15	17	17	16	19	18	18	16	16	17	16	19	17	17	19	1
24	16	19	18	18	20	19	17	19	16	15	17	18	23	22	20	18	16	17	18	17	16	17	15		1
25															33										3
26																									
27															32	31									3
28																									
29																									
30																									
MEAN	15.	15.	15.	15.	15.	15.	15.	15.	14.	16.	19.	19.	19.	19.	21.	22.	17.	16.	15.	14.	14.	14.	14.	15.	

TOTAL NUMBER OF OBSERVATIONS = 4214 MEAN = 16.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

```
                                  HOURLY TOTAL PRECIPITATION(INCHES)
                              TRAILER NO. - 20  PERIOD(11/ 1/74 TO 11/30/74)

                                                   HOUR
          1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 T
DAY

  1
  2
  3
  4
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 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30

TOTAL    0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

```
                          HOURLY TOTAL PRECIPITATION(INCHES)
                     TRAILER NO. - 21  PERIOD(11/ 1/74 TO 11/30/74)

                                          HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOT
DAY

  1
  2
  3
  4
  5
  6
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  8
  9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30

TOTAL  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.

              TOTAL NUMBER OF OBSERVATIONS =   288    TOTAL =    0.
```

```
                          HOURLY TOTAL PREC ITATION(INCHES)
                    TRAILER NO. - 22  PERIOD(11/ 1/74 TO 11/30/74)

                                                  HOUR
         1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 TO
DAY

 1
 2
 3
 4
 5
 6
 7
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11
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13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

TOTAL   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.   0.
```

```
                              HOURLY TOTAL PRECIPITATION(INCHES)
                       TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
       1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TOT
DAY

 1
 2
 3
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 9
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11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

 TOTAL 0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

```
                           HOURLY TOTAL PRECIPITATION(INCHES)
                       TRAILER NO. = 24  PERIOD(11/ 1/74 TO 11/30/74)

                                              HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 TO
DAY

  1
  2
  3
  4
  5
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  7
  8
  9
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 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30

 TOTAL  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

AY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	0	0	0	0	0	0	0	0	0	1	2	3	4	5	5		4	0	0	1	3	2	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2	2	0	0	1	1	1	0	0	
3	0	1	0	1	1	1	1	1	3	2	3	3	4	4	3	5	5	4	1	0	0	0	0	1	
4	0	[illegible]	[illegible]	0	0	0	0	0	0	0	0	0			1	1	0	0	0	0	0	0	0	0	
5	0	1	[illegible]	0	1	1	0	0	0	0	0		1	1		1	2	0	0	0	0	0	0	1	
6	1	1	[illegible]	1	[illegible]	0	0	0	0	0	0	0	1	1	2	1	3	0	0	0	1	1	0	0	
7	1	0	1	1	3	3	5	2	5	1	3	5	4	3	3	4	1	0	0	3	4	5	3	2	
8	4	5	5	5	6	3	3	4	7	1	2	4	3	4		6	2	0	0	0	0	0	0	0	
9	0	1	[illegible]	0	[illegible]	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	
10	0	0	[illegible]	4	4	0	[illegible]	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
11	[illegible]	0	[illegible]	0	[illegible]	0	0	2	4	2	0	0	3	3	2	0	0	1	0	0	1	3	0	0	
12	6	5	5	7	5	8	9	7	6	3	1	2	2	4	3	2	4	5	4	6	3	1	2	2	
13	3	3	3	2	2	2	2	3	4	3	1	7	9	4	8	3	0	1	0	1	0	0	0	0	
14	0	1	2	[illegible]	[illegible]	5	1	1	5	4	0	0	1	1	1	1	0	1	0	0	0	1	2	3	
15	0	0	4	0	2	0	0	0	0	0	0	2	0	1	1	2	4	0	1	0	0	1	1	5	
16	[illegible]	[illegible]	[illegible]	1	1	1	2	1	3	2	0	0	0	0	0	0	0	1	1	0	1	2	5	6	
17	5	4	5	5	2	3	6	3	3	3	2	3	4	4	3	5	2	1	1	1	3	2	1	0	
18	1	4	1	0	0	1	2	5	4	7	8	5	4	4	5	5	3	0	0	7	0	0	0	0	
19															0	0	0	0	0	0	0	0	2		
20	5	9	9	9	9	8	7	9	7	5	1	2	2	3	5	4	0	1	5	8	4	9	8	7	
21	4	6	9	2	7	9	9	8	4	2	5	5	4	5	5	4	0	0	2	3	1	4	2	2	
22	1	3	2	0	[illegible]	[illegible]	6	7	1	6	5	5	6	6	7	6	2	0	1	2	5	1	3	4	
23	[illegible]	0	0	[illegible]	0	0	0	4	0	0	1	1	0	0	0	0	0	0	3	4	3	4	4	5	
24	5	4	3	2	2	1	2	1	3	5	3	0	1	0	0	0	1	1	2	2	3	6	8	8	
25	10	9	10	10	11	11	9	11	5	2	3	6	4	3	7	8	3	1	0	0	1	2	2	1	
26	1	2	4	3	4	2	4	3	3	3	0	0	1	2	3	2	0	1	0	1	1	3	3	4	
27	6	0	5	6	6	10	6	9	9	7	3		4	7	4	2	0	0	1	1	1	0	0	2	
28	1	3	[illegible]	0	1	3	6	6	7	6	7	6	4	3	6	8	7	5	5	0	0	0	2	1	
29	1	1	1	1	1	3	4	4	5	5	1	1	2	0	1	0	0	0	0	1	1	1	1	0	
30	1	1	[illegible]	1	0	4	0	0	3	4	0	0	1	3	2	2	0	3	2	3	3	5	4	6	
MEAN	2.	3.	3.	2.	3.	3.	3.	3.	4.	3.	2.	3.	3.	3.	3.	3.	2.	1.	1.	2.	2.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 8295 MEAN = 3.

CORPORATION

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 21 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	4	5	3	3	3	2	3	1	4	3	2	2	7	4	6	6	5	2	4	4	6	5	2	1	4.
2	2	0	0	0	0	0	0	0	0	0	1	3	4	5	5	8	6	6	4	3	0	0	0	0	2.
3	2	0	0	0	4	3	3	6	6	7	7	7	6	4	2	6	6	1	0	0	0	0	0	0	3.
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
5	0	0	0	0	0	0	0	0	0	1	2		2	2	3	4	4	1	1	3	2				1.
6												0	1	2	4	3	3	2	2	3	3	2	4	5	3.
7	2	1	3	1	0	0	0	0	0	2	3	7	6	4	6	8	6	3	3	2	2	2	0	0	3.
8	0	0	0	1	4	1	3	5	3	1	3	7	5	4	4	7	1	0	1	1	1	1	1	1	3.
9	1	4	1	0	0	1	0	3	2	3	2	1	0	3	3	2	3	2	3	2	0	0	0	0	2.
10	0	0	0	0	0	0	0	0	0	2	3	3	2	2	2	6	3	1	2	1	0	0	0	0	1.
11	0	0	1	0	1	0	1	0	0	0	1	0	2	4	4	2	1	0	2	3	4	5	6	7	2.
12	1	3	4	5	7	7	5	3	4	5	7	8	6	7	7	8	8	6	7	6	6	7	7	6	6.
13	7	7	7	8	4	2	3	3	6	6	4	9	13	5	6	3	0	0	2	3	3	1	1	2	5.
14	1	1	3	2	2	1	1	1	0	3	3	1	1	1	4	3	2	2	4	6	6	7	8	7	3
15	6	7	3	0	1	1	0	1	1	1	6	7	1	3	0	5	5	1	4	3	2	0	0	0	3
16	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1	4	3	2	0	2	2	3	1
17	1	2	1	0	0	0	0	1	0	0	0	4	5	6	4	4	4	5	5	7	7	5	5	3	3
18	5	3	3	4	4	8	3	4	4	8	8	6	8	6	4	4	6	3	3	3	2	3	1	1	5
19	1	2	1	0	1	1	2	0	2	1	3	1	2	2	1	2	2	2	3	4	4	3	0	0	2
20	0	0	0	1	2	4	5	5	6	4	4	3	6	8	9	9	6	6	8	8	6	6	10	7	6
21	5	3	1	0	0	1	1	1	1	0	4	6	7	7	10	9	5	5	3	2	1	2	6	5	4
22	1	0	0	0	0	2	4	2	1	2	7	11	8	8	7	3	2	2	3	2	4	5	5	4	4
23	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	2	1	0	0	0	0	0	1
24	0	0	0	0	0	0	0	0	0	0	2	0	2	2	4	3	3	3	5	7	6	6	8	8	3
25	[illegible]	9	9	9	7	3	3	1	1	1	3	8	10	12											6
26	3	2	3	4	3	4	1	1	4	5	3	1	2	2	5	3	2	2	3	3	2	2	3	2	3
27	2	1	1	1	1	1	3	3	3	3	6	7	9	9	7	5	4	3	5	1	0	0	2	3	4
28	2	2	0	0	1	4	10	8	9	11	15	17	15	13	19	19	19	17	17	13	10	4	4	4	10
29	3	3	2	2	1	1	2	0	2	6	3														3
30	0	0	0	0	0	0	0	0	1	2	4	3	3	2	3	5	5	3	4	4	3	1	2	1	2
MEAN	2.	2.	2.	2.	2.	2.	2.	2.	2.	3.	4.	5.	5.	5.	5.	5.	4.	4.	4.	4.	3.	3.	3.	3.	

TOTAL NUMBER OF OBSERVATIONS = 8135 MEAN = 3.

DIURNAL VARIATI[illegible] OF WIND SPEED(MPH)
TRAILER NO. - 22 PERIOD(11/ 1/74 TO 11/30/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	4	3	2	2	2	0	0	1	1	4	3	4	6	6	6	8	5	4	2	5	4	3	1	1	4
2	1	2	1	4	1	2	1	2	[illegible]	2	2	1	2	3	4	5									3
3										4	4	4	4	6	6	6	5	0	0	0	0	0	0	0	3
4	[illegible]	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	0	0	0		3	4	3	3	6	2	1	1	0	2	1	4	1	2
5	4	5	5	4	3	4	4	4	5	2	1	1	4	3	3	2	0	0	0	1	2	4	5	5	3
6	5	5	3	2	2	4	2	3	1	2	2	2	0	4	3	2	0	1	0	1	4	6	5	5	3
7	3	4	7	7	[illegible]	9	[illegible]	6	5	4	6	6	5	5	5	4	2	2	4	9	8	10	7	4	6
8	11	[illegible]	7	[illegible]	8	5	7	8	9	7	6	5	6	7	7	8	1	1	2	0	2	3	2	1	6
9	3	4	3	[illegible]	2	[illegible]	[illegible]	[illegible]	1	1	0	2	2	3	3	1	0	0	0	0	0	0	0	0	1
10	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	0	0	0	3	4	0	1	1	1	1	1	1	2	0	0	1	1	1	1
11	1	2	4	4	1	2	3	5	7	5	2	4	6	7	5	3	1	2	4	3	5	5	6	9	4
12	8	8	7	7	7	7	[illegible]	9	9	6	5	9	7	7	7	8	5	4	1	2	5	4	1	2	6
13	6	6	6	5	5	6	6	8	10	7	4	13	7	6	11	6	2	2	1	1	2	6	3	3	6
14	3	2	5	6	4	5	7	7	9	7	3	2	3	3	2	2	3	2	1	1	2	2	3	4	4
15	6	5	5	5	7	8	5	4	5	5		4	2	3	3	4	6	1	1	2	7	3	6	6	5
16	6	8	7	7	[illegible]	8	7	7	7	6	2	1	2	2	0	1	3	4	2	4	4	10	11	10	6
17	9	[illegible]	7	[illegible]	13	10	[illegible]	9	10	7	5	4	5	5	2	2	1	3	5	8	10	8	6	7	7
18	4	3	[illegible]	[illegible]	1	2	6	7	9	10	8	7	5	4	7	6		1	1	9	4	1	2	0	5
19	[illegible]	2	[illegible]	2	2	[illegible]	[illegible]	0	0	1	1	1	4	5	3	0	0	1	2	3	3	5	5	6	2
20	[illegible]	7	7	8	9	9	[illegible]	11	9	8	5	5	3	5	4	2	3	4	9	11	8	11	9	11	8
21	12	12	[illegible]	12	13	13	12	12	8	6	5	5	5	6	5	5	3	5	7	6	8	7	3	2	8
22	2	1	3	7	9	9	11	13	11	7	7	6	6	6	8	10	5	2	2	5	9	3	3	4	7
23	6	5	5	3	[illegible]	0	1	1	1	3	2	3	2	1	0	0	3	3	3	5	5	6	8	9	4
24	[illegible]	7	7	9	8	7	9	6	12	10	7	2	2	1	2	1	3	3	6	3	2	6	7	6	6
25	[illegible]	[illegible]	[illegible]	11	11	14	13	[illegible]	8	8	8	5	7	5	5	9	6	2	1	1	4	5	4	4	8
26	6	9	9	[illegible]	9	9	[illegible]	6	8	7	1	1	2	4	6	3	1	5	5	5	5	8	10	11	7
27	5	4	7	[illegible]	12	12	14	15	15	10	7	5	3	5	5	3	3	2	5	4	5	3	1	1	7
28	4	0	1	1	3	5	[illegible]	6	7	7	8	9	8	4	7	9	5	1	4	3	1	1	2	2	5
29	2	4	7	8	8	9	8	9	9	10	2	2	5	4	3	1	2	3	2	4	5	5	8	8	6
30	9	[illegible]	[illegible]	9	10		9	9	8	6	5	5	6	4	4	3	3	6	6	8	11	11	12		8
MEAN	5.	[illegible]	5.	6.	6.	6.	7.	7.	7.	6.	4.	5.	5.	5.	5.	4.	3.	3.	3.	4.	5.	5.	5.	5.	

TOTAL NUMBER OF OBSERVATIONS = 8321 MEAN = 5.

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 24 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1																									
2																									
3																									
4																		0	0	0	0	1	1	0	0
5	2	2	2	2	1	2	2	2	0	0	0	1	2	3	1	2	4	1	0	0	0	0	0	3	2
6	2	2	0	3	2	2	2	0	0	0	0	0	2	5	3	4	5	6	6	0	0	2	0	2	2
7	1	2	2	2	1	2	2	1	1	4	7	6	7	5	5	6	6	3	4	3	3	2	0	6	4
8	5	1	1	2	3	3	1	4	2	4	5	8	7	6	4	7	1	2	1	0	0	1	0	0	3
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	3	1	4	5	2	1	1	2	1
11	3	0	1	0	0	0	1	2	1	0	0	0	3	5	3	1	0	0	2	0	2	3	2	2	2
12	2	3	3	4	3	3	3	3	2	1	3	5	5	6	6	8	8	4	3	3	1	2	4	1	4
13	1	2	3	3	2	3	3	2	0	0	5	11	14	7	9	7	2	0	0	0	0	0	0	0	3
14	0	0	0	0	1	3	3	3	1	1	0	3	3	4	5	6	7	2	0	1	1	1	2	3	3
15	3	2	2	2	2	3	1	2	1	0	2	3		2	2	2	8	2	1	0	0	0	0	0	2
16	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	5	2	2	1	1	2	3	1
17	1	3	2	2	2	3	3	3	1	1	4	6	6												3
18													9	14	13	12	10	2	5	12	2	1	0	0	7
19	0	0	0	0	1	0	0	0	0	0	0	1	2	0	2	3	3	5	1	0	1	0	2	3	1
20	3	3	3	3	3	3	3	3	1	1	3	4	5	7	8	6	3	2	4	4	3	4	3	3	4
21	5	3	4	3	4	3	4	4	3	5	10	9	11	10	8	9	3	2	3	2	2	4	4	4	5
22	2	1	3	1	1	2	5	10	7	7	6	10	11	10	12	11	12	3	4	7	9	1	2	0	6
23	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	1	3	3	3	3	4	1
24	4	3	2	3	2	3	3	2	0	0	0	0	4	4	2	1	3	5	2	3	3	3	4	3	3
25	4	4	4	3	4	2	6	6	4	8	3	4	11	16	19	19	15	10	5	3	6	0	1	3	7
26	0	0	0	0	1	0	1		1	0	0	0	1	2	5	4	1	0	0	1	2	3	2	2	2
27	3	3	3	3	3	4	3	4	3	3	3	7	8	7	5	3	2	1	3	1	0	0	3	2	4
28	4	2	2	0	1	5	8	7	9	7	10	11	9	6	9	13	11	5	3	6	8	6	4	3	7
29	0	0	0	0	0	0	1	1	2	2	1	1	3	0	0	0	0	0	0	0	3	3	3	4	1
30	3	3	2	2	3	4	5	4	2	3	2	0	1	3	3	5	4	4	3	2	3	4	3	3	3
MEAN	2.	2.	2.	2.	2.	2.	3.	3.	2.	2.	3.	4.	5.	5.	5.	6.	5.	3.	3.	3.	3.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 7224 MEAN = 3.

DIURNAL VARIATION OF WIND SPEED AT 8 FEET(MPH)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15													2	5	2	3	5	2	3	2	2	1	1	2	3
16	2	2	2	2	0	1	2	1	1	1	2	2	2	3	3	2	1	4	3	2	1	2	3	3	2
17	2	3	2	2	2	3	3	2	2	2	8	3	11	9	8	9	5	3	4	5	3	2	7	8	5
18	2	12	11	13	12	14	16	15	18	19	18	16			16	12	11	11	8	11	4	4	1	3	12
19	2	2	1	2	1	2	2	3	3	2	2	3				3	4	3	3	3	1	1	2	2	3
20	2	4	5	3	4	5	5	4	2	0	3	1	8	9	9	8	5	4	5	4	3	2	3	4	5
21	2	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	2	3	2	0	2	1
22	14	9	9	3	2	1	4	9	7	6															7
23													1	1	1	1	2	1	3	0	1	0	0	0	1
24	1	1	0	1	2	1	0	1	1	2	1	2	6	6	4	3	3	3	4	3	2	2	2	3	3
25	4	3	3	5	5	4	5	4	9	7	8	12	16	19	19		14	9	4	5	6	4	1	3	6
26	2	1	2	2	2	2	1	3	3	1	1	2	4	5	6		3	2	4	2	1	3	3	3	3
27	3	3	4	3	4	4	6	4	5	3	4	9	9	7	12	8	2	0	3	2	2	2	4	3	5
28	4	5	4	1	3	6	9	8	8	8	10	11	11	7	10	14	11	6	5	5	5	4	4	5	7
29	4	5	3	0	0	0	0	2	2	2	3	3	5	1	3	3	1	2	3	1	1	2	2	0	2
30	2	1	2	2	2	1	0	1	2	3	2	2	2	6	5	7	5								3
MEAN	4.	4.	4.	3.	3.	4.	4.	4.	5.	4.	5.	6.	6.	6.	7.	6.	5.	4.	4.	4.	3.	3.	3.	3.	

TOTAL NUMBER OF OBSERVATIONS = 3940 MEAN = 4.

DIURNAL VARIATION OF WIND SPEED AT 30 FEET(MPH)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																								
AY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	5	4	6	8	6	9	8	4	4	6		10	12	13	11	12	7	4	4	6	5	6	4	4	7
2	2	3	4	5	3	2	3	3	2	5	5	5	4	6	9	7	6	3	6	5	7	7	6	6	5
3	5	6	5	6	6	6	5	6	6	6	7	8	8	7	6	9	9	7	6	5	4	4	4	7	7
4	3	4	2	3	2	2	2	3	1	1	3	4	3	4	4	4	3	3	3	3	3	2	3	6	3
5	3	2	4	4	2	2	2	2	1	3	3	3	4	4	5	7	6	6	4	4	3	1	2	2	4
6	3	4	3	3	3	2	4	3	5	3	4	3	7	10	7	7	8	7	7	5	2	5	4	2	5
	3	1	4	4	4	5	5	3	3	10	10	13	12	10	10	11	10	7	7	7	7	7	9	11	8
	10	10	10	9	11	8	5	4	8	10	9	12	10	11	7	9	7	5	5	2	4	5	2	4	8
	4	3	1	3	2	2	4	1	1	2		3	2	3	5	3	2	3	2	3	2	2	1	3	3
	3	2	2	3	2	4	4	2	1	4	5	2	2	3	2	6	6	5	8	6	5	3	4	6	4
	6	4	5	3	3	3	2	2	2	3	2	3	6	7	6	5	4	2	4	6	5	4	3	4	4
	4	5	4	5	5	4	5	5	6	9	12		9	10	11	13	13	10	6	7	5	11	13	9	8
	5	11	5	9	5	7	6	4	5	8	11	14	17	11	13	8	3	2	3	4	2	3	4	5	7
	4	4	3	5	4	5	5	3	2	6	5	6	7	9	10	11	10	10	5	4	4	5	3	7	6
	6	3	3	4	4	5	5	5	5	4	6	9	5	7	4	5	9	4	5	4	4	3	2	3	5
	4	4	5	4	1	2	3	3	2	2	3	4	3	4	4	4	3	7	6	4	2	3	6	6	4
	5	5	5	5	5	6	5	5	4	3	10	10	14	12	10	12	8	5	6	9	6	4	10	9	8
	3	15	14	17	16	18	21	20	22	24	23	20	18	20	21	15	15	14	11	15	8	8	2	5	16
	5	4	2	4	4	1	1	1	1	1	4	4			4	4	7	5	6	5	3	4	4	5	4
	5	7	7	5	6	10	6	6	5	5	8	8	11	12	12	11	8	7	8	7	7	5	5	7	8
	8	9	9	6	5	6	6	7	6	10	14	15	15	14	14	13	5	5	7	7	7	7	7	14	9
	20	12	13	6	4	3	6	13	10	12	12	16	16	17	16	14	13	9	9	10	9	3	8	9	11
	12	11	12	4	4	3	3	2	3	3	4	4	3	2	2	3	4	4	6	2	3	1	2	2	5
	3	3	3	3	4	4	2	2	3	4	2	3	8	7	5	5	5	7	7	5	4	5	4	6	5
	5	6	9	10	9	7	6	7	14	10	10	15	21	25	25		18	12	7	9	10	7	3	5	11
	5	3	5	5	5	5	4	5	5	3	3	4	5	8	8		6	3	6	4	2	5	5	5	5
	6	6	7	6	6	7	9	6	8	5	7	12	12	9	15	11	4	2	5	4	3	4	7	5	7
	7	6	7	2	5	9	12	11	11	11	14	15	14	10	14	19	16	9	9	9	9	8	7	7	10
	5	7	6	3	2	1	2	4	3	4	4	5	7	3	4	4	2	3	5	2	2	4	3	2	4
	4	2	4	3	3	4	3	2	4	5	3	4	5	8	7	10	9								5
EAN	6.	6.	6.	6.	5.	5.	6.	5.	6.	7.	8.	9.	9.	9.	9.	9.	8.	6.	6.	6.	5.	5.	5.	6.	

TOTAL NUMBER OF OBSERVATIONS = 8398 MEAN = 7.

DIURNAL VARIATION OF WIND SPEED AT 100 FEET(MPH)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

Y	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	8	5	5	11	8	11	10	6	6	7		12	13	14	12	13	7	5	6	8	7	7	6	6	9
2	4	5	5	3	5	4	4	4	3	5	5	6	5	7	9	6	7	4	7	7	9	8	7	8	6
3	6	7	6	7	6	7	5	7	7	7	7	9	8	8	7	10	10	6	7	6	5	6	6	8	8
4	7	5	2	4	3	2	3	4	1	1	3	4	4	4	4	4	4	3	4	3	3	2	4	7	4
5	2	2	3	3	2	1	2	2	1	3	4	3	4	4	6	9	7	8	6	4	2	1	1	2	4
6	4	5	2	3	3	3	2	4	5	3	3	3	7	11	6	6	10	11	12	7	3	6	6	3	6
7	4	2	4	4	5	5	5	2	2	11	11	14	13	11	11	12	12	8	8	8	9	9	12	11	8
8	10	12	12	11	11	9	6	8	11	11	10	14	12	12	7	10	8	7	8	3	5	6	4	5	9
9	5	3	1	3	3	2	3	2	2	3		3	2	3	6	4	1	2	1	0	0	0	0	0	3
10	0	3	[illegible]	0	4	0	0	0	0	5	5	3	3	3	2	7	8	8	10	8	8	5	6	8	4
11	7	0	[illegible]	5	6	5	2	2	2	3	2	4	6	8	7	5	5	3	5	10	9	4	2	3	5
12	4	3	5	8	7	4	6	8	9	11	11		10	12	12	15	15	13	6	9	6	14	16	12	10
13	7	15	5	12	[illegible]	6	6	5	5	9	12	16	19	13	14	9	4	3	3	5	3	4	4	5	9
14	4	3	4	4	12	8	4	4	5	8	7	6	7	10	10	13	13	13	8	6	5	5	5	10	8
15	11	4	3	5	5	8	7	6	7	4	6	10	4	7	4	6	10	6	5	4	3	3	2	3	6
16	5	4	3	3	3	2	4	4	2	3	4	4	3	4	4	4	3	11	11	4	2	3	7	6	5
17	5	6	4	6	5	6	6	6	4	3	11	11	15	13	12	14	9	6	9	12	7	4	13	11	9
18	4	19	18	21	19	22	24	23	25	27	26	24	20	24	25	18	18	18	14	17	10	10	3	6	19
19	8	5	5	3	5	5	6	7	6	4	4	5				5	8	8	8	10	8	8	4	4	6
20	5	2	[illegible]	7	[illegible]	15	12	8	8	5	9	9	12	13	14	13	10	8	10	10	9	8	7	8	10
21	[illegible]	12	11	7	7	6	6	10	7	11	16	17	17	16	15	15	6	6	9	9	8	8	10	17	11
22	25	15	16	7	7	4	10	17	12	13	13	18	18	19	18	16	16	12	11	13	11	4	10	11	14
23	15	13	14	10	5	5	4	3	6	4	5	5	3	3	2	3	5	7	7	3	2	2	1	3	6
24	3	2	2	4	4	4	2	3	3	4	3	3	9	8	6	5	7	10	10	7	4	6	5	8	6
25	8	9	9	14	13	9	11	9	16	11	12	19	24	20	29		21	15	9	12	14	10	4	6	14
26	5	3	5	5	7	6	5	4	6	2	4	4	6	8	9		7	4	5	3	2	4	4	5	6
27	6	5	7	7	7	9	12	8	10	6	7	13	13	10	17	12	5	2	6	4	2	4	9	5	8
28	9	4	9	3	5	10	13	12	13	12	16	17	15	11	16	22	19	11	11	11	11	11	8	7	12
29	5	9	7	4	2	2	2	3	5	4	4	5	7	3	4	4	2	1	2	3	2	6	3	2	4
30	3	3	3	3	1	3	3	2	5	5	3	5	5	9	7	11	11								5
MEAN	7.	7.	7.	7.	7.	7.	7.	7.	7.	7.	8.	9.	10.	11.	11.	10.	9.	6.	8.	7.	6.	6.	6.	7.	

TOTAL NUMBER OF OBSERVATIONS = 8392 MEAN = 8.

DIURNAL VARIATION OF D SPEED AT 200 FEET(MPH)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	9	6	9	12	10	13	12	6	6	7		11	13	14	11	13	7	5	5	7	7	8	7	5	9.
2	3	4	4	6	6	4	5	3	2	4	4	5	4	7	9	7	7	4	7	6	8	9	7	7	6.
3	5	5	5	5	5	7	5	5	5	5	5	7	6	5	6	8	9	8	7	6	6	5	5	7	6.
4	7	5	2	2	2	1	2	2	0	0	2	3	3	2	3	3	3	2	3	2	1	1	3	7	3.
5	1	0	1	0	1	0	0	0	0	1	2	2	3	3	5	6	6	8	6	3	1	0	1	3	3.
6	5	5	1	2	1	2	0	3	4	3	2	2	7	10	7	8	10	12	13	6	2	4	3	4	5.
7	6	1	2	3	3	3	6	2	4	10	10	13	13	11	11	12	13	8	7	7	9	9	14	10	8.
8	9	11	11	14	6	6	6	10	12	11	10	14	12	12	6	10	8	7	8	3	4	4	3	4	9.
9	4	2	3	4	3	1	2	2	2	3		2	2	2	5	5	0	0	0	0	0	0	0	0	2.
10	0	0	0	0	0	0	0	0	0	2	4	2	2	3	2	8	9	10	12	9	8	5	6	7	4.
11	6	6	7	6	5	6	3	1	1	2	1	3	5	8	6	4	4	4	4	11	13	7	4	4	5.
12	7	5	7	11	12	8	5	13	12	12	11		10	12	13	15	17	16	6	9	7	18	19	15	12.
13	9	20	6	15	5	6	5	5	6	10	11	16	20	13	13	9	4	3	3	4	3	5	3	4	9.
14	3	1	2	5	10	9	3	7	8	8	6	6	6	9	10	14	15	16	10	8	5	6	7	13	8.
15	15	8	4	3	2	6	7	5	6	3	5	9	4	7	3	4	10	8	5	2	1	3	2	2	6.
16	5	3	1	1	2	2	2	3	1	2	3	3	2	3	4	3	2	11	14	5	2	1	5	4	4.
17	4	4	7	4	3	5	5	4	3	3	11	11	16	13	12	14	9	8	11	13	7	5	16	12	9.
18	5	22	20	25	22	27	28	27	26	29	28	25	21	26	26	19	19	21	16	19	8	11	2	6	21.
19	8	5	3	2	4	6	5	6	6	3	3	4			3	5	8	9	9	10	12	12	5	4	6.
20	3	14	11	6	10	18	14	10	9	5	9	9	12	13	14	13	10	7	10	11	8	8	7	7	10.
21	6	11	12	7	7	7	8	11	8	12	16	18	17	17	15	16	6	5	9	9	9	9	12	21	12.
22	28	17	16	9	8	5	10	18	13	13	13	16	18	20	19	17	17	14	12	13	10	5	10	11	14.
23	15	14	15	11	7	5	4	3	7	4	4	4	2	1	1	2	4	6	5	4	2	2	1	3	6.
24	1	0	2	2	3	3	1	2	1	2	2	3	8	8	6	5	8	11	12	8	4	5	5	9	5.
25	8	9	8	15	13	9	11	11	16	11	12	21	26	32	32		23	19	10	16	18	13	4	7	15.
26	7	5	6	8	5	7	5	2	5	1	3	3	5	7	7		6	4	2	3	2	2	1	3	5.
27	6	5	7	5	7	9	12	7	11	5	7	13	13	10	18	10	4	2	6	4	2	5	9	6	8.
28	9	7	9	4	5		11	11	10	11	15	17	16	11	16	23	21	11	10	11	12	12	9	9	12.
29	6	8	5	3	1	1	2	1	3	2	3	3		2	3	3	2	0	0	1	1	5	2	1	3.
30	1	3	3	2	1	1	3	2	4	4	2	4	4	8	7	10	12								5.
MEAN	7.	7.	7.	7.	6.	7.	7.	7.	7.	7.	8.	9.	10.	10.	10.	10.	10.	9.	8.	8.	6.	7.	6.	7.	

TOTAL NUMBER OF OBSERVATIONS = 8378 MEAN = 8.

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                              DIURNAL VARIATION OF WIND DIRECTION
                          TRAILER NO. - 22  PERIOD(11/ 1/74 TO 11/30/74)

                                                    HOUR
        1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24  MEA
DAY

  1   112  117  113  104  107  101   92   95  112  120  162  166  185  190  218       112  110  109  109  100  109   92  120  120
  2   120  120  101   93  114  114  130   75   47   39  280  277  279   13  344  337  341  332  334  307  293  291  328  328    3
  3   283  281  284  287  286  317  303  282  275  286  296  293  293  276  288  279  275  275  283  291  287  267  287  281  284
  4   272  273  290  301   17   41   94   92   65   79   14  273            288  272  275   15   90   99   74  102  138   84   33
  5   113  130  125  104  113  105  102  103  125  276  292       282  291       293  289  360  109  109  105  112  120  126  114
  6   135  124  104  173  105  103   90   25  341  327  299  316   25  282  247  232  263  210   85   91   99  176   95   91   92
  7   100   55   44  117  132  122  119  118  125  119  153  109  178  170  157  156  174  107   96  122  128  119  119  100  131
  8   123  125  122  110  125  127  110  107  127  109  171  123  222  228       303  354  104   80   86   80   99  101  101  119
  9    94  107   55   45   62   45   40   94  113  121  349  349  164  147  349   45   87   58  110  105  116  131  131  131   86
 10   131  131  132  131  131  131  131  131  128   99   92   78   62  155   59  187  300   90  349   28   78   92  108   92  106
 11    96  111  104   65   60   62   59   61  131  143  329  292  262  284  298  282  324  106  125   87   94  115   84   87   82
 12   124  125  120  131  124  133  129  121  127  118   99  155  163  184  186  110   93   82   87   83  120  103   95  110  122
 13   116  107  117  113  102   98   94  114  134  130   90  309  339  333  277  336   10   89   95   96   92   95   56   98   87
 14   105  103  110   94   95  119  120  122  125  132  115  113  107  223  164  181   75  111  110  113   99   97   95   98  117
 15   112   95   62   76  122   79   77   52   44   94  111   98   94  269  266  253  288   60  107  105   98  106  106  131   94
 16   102   91   99  120  106  110  128  122  139  137   99  105  267  251  137  109   84  100  101   91  105  120  131  130  119
 17   120  132  127  123  104  127  126  122  103  120  134  106  207  191  211  245  244  111  120  102  109  114  105   96  135
 18   125  121  107   92   70   92  171  109  145  160  167  204  133  213  245  245  320   96   90  276  314   66   92   88  121
 19                                                                        252  292  332   86  109  100  105  105  110        96
 20   130  124  132  126  130  123  130  130  133  128  112  182  160  158  161  167  149   97  117  129  114  126  125  123  134
 21   110  114  125   95  124  132  130  125  119  132  181  171  182  177  181  104  121   95  105   98   94   96  105  105  129
 22    96  117  101   75  345   31  111  106   94  136  156  187  107  221  230  265  253   58  119  314  285  333  291  271  142
 23   290  203  310  345   31   51   45   74   79   64  298  283  284  257  179  186   84   88  118  126  132  130  130  127   86
 24   132  135  131  128  136  100  121  119  127  133  130  100  185  194  193  161  105   95  106  104  116  124  127  125  133
 25   120  131  130  123  123  129  134  135  111  104  174  165  107  234  233  246  266  307   69  101   96  100  105  101  136
 26   101  114  125  120  125  123  130  122  128  131   99   26  101  273  276  287   20  102   90  100   95  112   95  117  108
 27   125  125  115  121  131  127  129  130  124  120  103       178  206  160  136   67  111  112  101  105   81  346   73  120
 28   270  274  307  316  260  292  263  276  200  292  322  311  308  305  324  324  326  336  335  307  342   97  113  115  378
 29   111  125  117  114  110  126  131  136  129  127  131  286  269  275  262  247   88   94   96  107  111   90  103   90  121
 30   103   79    4   93   95   84   77   12  106  139  293   62  129  104  111  196  116  117  105  110  128  131  120  132  103

MEAN  117.117.278.274.105.102.106.104.116.121.132.209.203.220.229.241.  4. 85. 96. 97.100.106.105.107.

                    TOTAL NUMBER OF OBSERVATIONS =  8291     MEAN  =  114.
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                               DIURNAL VARIATION OF WIND DIRECTION
                           TRAILER NO. - 21  PERIOD(11/ 1/74 TO 11/30/74)

                                             HOUR
         1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1    122 128 137 113 117 124 121 114 125 140 176 359 335 354 169 171 156 136 119 117 140 134 112  96 126
  2     35 144 111  95 245 315 337  53  81 355 326 336 334 335 341 342 351 338 333 325 322 314 313 310 346
  3    311 236 272 322 332 326 329 341 337 335 338 338 335 329 310 314 319 309 274 254 310 301 310 298 315
  4    296 292 272 290 249 291 291 231 295 153 124  35  69  25 185 309 278 357 140 127 149 149  94  91 299
  5    133 138  45  42  42  42  65 107  14 337 335     317  15 340 326 325 332  90 126 125              34
  6                                                  96  83 292 219 184 179 177 142 129 137 150 121 118 148
  7    155 175 164 145 158  76  74  30  16 342 335 153 174 177 166 152 166 144 143 140 148 175 156 147 149
  8    144  59   7 121 155 153 156 124  81 111 127 175 171 227 197 313 317  72 130 138 139 137 134 138 136
  9     60 115 120 126 133 125 120 116 128 119 195 243 169 161 109 116 115 110 113 116 138 136 136 136 132
 10    137 136 135 140 140 138 138 136 121 131 176 107 103 137 117 272 315  79 301 307 333  19 134 136 123
 11    132 128 135 133 137 142 144 142 347 337 337 332  13 345 349 330 351 123 126 133 123 119 115 115  98
 12    124 135 121 116 119 103  91 121 112 129 123 136 137 151 133 150 126 136 130 129 126 111 105 107 124
 13    107 108 100 112  70 152 153 141 115 118  73 334 348 340 328 347 256 339  94 132 136 140 143 141 105
 14    144 150 145 156 164 104 211 231 307 360 335  24  14 190 161 166 129 123 111 108 110 111 110 107 138
 15    112 118 122   6 322 341 124 145 265  80 130 115  83 335  73 276 291  29 130 142 151 167 131 139 110
 16    152 154 155 152 158 163 162 159  10 324 329 342 307 319 204 173 138 134 131 154 145 146 152 158 157
 17    163 161 168 104  36  14  14   7   6 335 348 174 159 169 174 179 174 144 123 109  99 117 111 127 130
 18    123 123 134 122 131 135 139 161 146 147 154 167 153 173 151 171 157 132 121 292 221 134 106 118 146
 19    121 135 131 135 143 105 135 105  21 199 122 132 120 153 124 218 278 125 121 122 126 149 164 106 134
 20     43 145 101 130 167 129 127 112  98 123 124 182 174 154 162 159 136 121 106 105 116 117 103 109 135
 21    113  91 254 125  12  14 342   1 337 340 211 184 200 174 162 161 149 119 156 148 161 148 119 103 139
 22    355   2 122  75 131 133 129 338 360 332 161 166 186 182 169 174 167 139 128 335 322 327 330 319 119
 23    303 328 341 328 320 263  71 110  85 143   2 278 288 299 176 171 145 132 117 111 119 120 166 155 127
 24    106 158 154  17  65 121 345  72 100 101 329 225 111 165 153 156 140 134 123 105 113 112 107 105 121
 25    175 101 101  97 100 177 148   6 347 348   3 149 150 162                                          97
 26    134 154 136 127 153 125 160 159 122 119 111 125 164 204 312 306 328 135 135 157 166 165 160 163 149
 27    152 210  33  24  26 332 349  40 115  80 132 152 148 167 145 148 132 128 118  90  89 142 306 160 114
 28    315 341 320 315 315 325 335 329 326 335 341 343 343 333 340 346 344 345 343 346 342 308 237 135 331
 29    132 130 156 158 168 167 174 159 154 112 108                                                     149
 30     54  32  60 135  83  73  69  65  60 333 331 332  95 116 134 170 147 121 111 126 172 179 241 358  99

MEAN   124.129.130.117.124.109.110. 98. 56. 52. 64.143.125.193.161.201.175.113.122.125.134.138.133.124.

                         TOTAL NUMBER OF OBSERVATIONS =  8122     MEAN  =  124.
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DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. - 22 PERIOD(11/ 1/74 TO 11/30/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	97	75	70	70	75	107	121	93	95	128	146	139	158	138	142	112	114	132	133	119	115	104	86	98	112.
2	72	74	55	101	102	93	63	318	47	68	119	247	278	24	282	21									57.
3										252	275	301	300	259	272	265	265	257	254	250	265	280	257	273	270.
4	[illegible]	253	195	76	47	38	90	100	76	152		290	290	262	263	284	247	102	53	90	79	58	104	90	84.
5	[illegible]	111	99	95	99	101	101	[illegible]	83	121	259	211	254	305	258	253	287	357	92	75	70	105	110	102	103.
6	102	94	104	51	74	75	80	92	108	279	272	270	97	248	255	244	115	125	70	51	77	99	110	110	102
7	98	95	102	[illegible]	110	106	113	111	109	173	148	126	181	155	125	122	122	82	96	105	103	109	102	110	115
8	[illegible]	[illegible]	109	111	111	109	126	96	97	109		194	270	259	276	296	62	58	79	39	67	73	89	57	92
9	135	104	95	91	91	87	71	60	74	67	93	253	202	177	121	271	357	90	81	107	108	67	79	78	93
10	72	104	141	95	94	342	217	102	323	111	103	248	234	215	138	139	137	74	307	89	90	147	45	4	105
11	14	83	98	95	55	95	94	91	94	95	14	279	259	271	264	253	119	82	98	91	100	107	109	110	88
12	107	104	110	109	110	111	129	109	107	108	108	107	105	111	114	100	116	98	72	70	82	81	89	72	101
13	111	91	105	86	83	107	105	104	107	105	109	292	330	316	283	301	278	99	66	66	60	88	82	84	84
14	84	76	85	128	93	95	104	123	103	125	90	165	321	263	161	192	116	70	69	72	95	72	73	81	98
15	94	104	96	102	110	114	102	97	95	102		77	137	269	252	255	272	43	77	80	109	93	101	109	101
16	[illegible]	105	111	111	112	112	105	94	91	102	120	143	211	292	290	143	96	66	65	96	75	109	112	113	110
17	109	114	113	112	113	114	115	117	111	111	137	154	217	253	192	213	137	89	95	102	107	108	85	90	123
18	85	35	87	79	122	318	[illegible]	120	132	126	112	170	93	339	272	280		66	50	266	257	11	68	25	82
19	[illegible]	[illegible]	77	72	104	93	303	216	332	114	151	223	260	261	246	190	135	62	64	92	99	101	105	107	129
20	[illegible]	110	106	112	110	109	112	111	104	114	111	113	143	156	216	114	117	94	104	107	108	106	104	108	115
21	106	106	105	107	110	108	127	126	121	95	137	139	190	252	149	124	104	85	102	95	95	82	85	87	111
22	131	104	[illegible]	[illegible]	[illegible]	101	126	98	107	116	122	145	169	175	266	278	285	97	115	161	264	227	267	274	137
23	259	257	283	271	254	276	320	356	20	87	52	285	265	225	124	131	94	74	92	112	104	89	88	89	59
24	[illegible]	105	105	114	104	113	110	111	109	109	108	98	133	244	255	137	77	79	106	90	84	100	105	101	108
25	[illegible]	102	106	105	104	104	104	97	88	91	97	95	113	308	317	278	285	282	43	40	81	84	92	85	86
26	84	[illegible]	109	105	105	106	109	111	99	107	135	141	259	287	274	244	93	85	106	102	105	114	117	113	114
27	125	135	111	112	115	114	125	155	103	113	113	137	123	213	132	257	227	79	87	83	103	102	278	299	118
28	132	291	295	290	285	270	273	277	265	275	274	276	279	256	281	290	292	264	257	286	1	31	40	49	290
29	75	[illegible]	113	143	104	102	[illegible]	91	97	109	114	236	260	261	254	169	99	74	52	99	106	106	112	114	108
30	112	112	113	109	110	110	109	107	104	103	109	95	97	110	112	124	114	108	109	104	109	108	111		109
MEAN	97.	94.	141.	99.	99.	97.	104.	99.	93.	110.	123.	182.	213.	249.	226.	218.	122.	82.	84.	91.	92.	94.	94.	88.	

TOTAL NUMBER OF OBSERVATIONS = 8318 MEAN = 105.

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                                   DIURNAL VARIATION OF WIND DIRECTION
                                 TRAILER NO. - 24  PERIOD(11/ 1/74 TO 11/30/74)

                                                   HOUR
DAY    1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 ME

  1
  2
  3
  4                                                                    224  14 241  83  68  86  13   5
  5  105  97  97 102  98  95  95  93  52 311 340 310 306 258 292 261 274 269 241 237  34  48  88  89   4
  6   76  80  76  85 100 103  93  41 288 345 319 345 144 186 193 188 212 193 156 203  82 107  84  86  11
  7   75  74  91  61  93  85  80  81  58 102 126 154 169 184 164 173 171 151 147 118 124 104  66 159  11
  8  154 100  95  82  97  86  73  85  55 134 158 193 202 186 226 286 332  70 113 359 356 114  51   6   9
  9  215 143  39 243  58 101  91  42  59  77 306 239 168 148  73 356 114 138  46  95  95  85  88  84   9
 10  243 104  72  81 116 293 316  70 342  53  78  90 111 252  44 221 236 218 230 251 296  23  90 108   7
 11  114  82 126  23  49  87  77  63  65  47 352 286 291 281 284 288 289  50 120  56  64  70  65  82   5
 12    5  75  75  69  66  68  74  71  59  99 159 174 185 176 166 167 160  94  75  71  77 105 142  77  10
 13   64  52  83  65  70 105  94  64  94 329 299 282 308 322 279 293 317 263 251 282 125  87  82 123  32
 14   28 345  64  63  73  73  73  77  60  43 145 204 213 169 161 175 160  83  61  69  61  56  72  52   8
 15   55  65  53  73  78  73 102  69  57  67  68 103     315 265 278 256 255 198  88  84  66  74 173   7
 16   13  82  67  93  74  82 107  66  53  55  47  39 349 307  34  46  47 162 113  68  73  99  98  93   6
 17   80  90  74  75  84  69  72  76  61  21 162 175 185                                              92
 18                                                177 182 198 205 210 144 152 234 255 157  67 299 191
 19  225 235  79  43 102 113 122  99 346  66   4 281 252 226 250 265 241 194 113  63  67  59  65  75  81
 20   83  87  75  74  91  75  80  81  68  81 197 172 168 172 178 167 134 112  98  84  73  93  79  84 105
 21  125  80  62  68  68  91  69  71  32 122 167 165 170 181 159 155 125 114 102  98  85 114  95  57 107
 22   41  50 129  57  86  96 110 130 112 127 136 172 166 165 200 212 207 152 148 189 264 171 292 271 147
 23  291 222 324 321 345 349 262 353 329 341 288 262 293 204 121 129 154 139 106  83  91  84  87  79 353
 24   82  87  76  86  74  79  66  83  83  65  39  94 107 205 175 172 166 149  96  71  61  70  65  70  96
 25   [illegible]  81  75  73  73  81  64  61 104 113  57 144 165 165 177 199 202 206 223 241 217  68  44 207 125
 26   31  66 125 143 102  68  86 120  68  42  76 146 275 228 259 281 297  25 105  89  77  81  87  84  92
 27   71  74  77  77  85  93 101 104  93  55  36 170 175 196 163 181 189 185 129  80  89 320 261 203 118
 28  140 271 277 334 266 274 257 257 263 281 288 290 292 299 301 303 299 289 226 249 232 242 237 233 272
 29   25 135  85  75  72  77  75  74  62  75  21 300 279 359 321 352  82  52   9  60  87  75  85  89  55
 30   81  59  83  64  83  68  85  88  71  54   9  50 104  86 130 182 153 116  90  94 106  98 102  94  93

MEAN  70. 87. 77. 73. 81. 82. 87. 79. 57. 60. 49.192.205.209.200.220.200.153.124. 97. 81. 85. 81. 91.

                        TOTAL NUMBER OF OBSERVATIONS =  7237     MEAN  =   95.
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                         DIURNAL VARIATION OF WIND DIRECTION AT 8 FEET
                         TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                                 HOUR
       1    2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24 MEAN
DAY

  1
  2
  3
  4
  5
  6
  7
  8
  9
 10
 11
 12
 13
 14
 15                                                              119  360  302  311  289  259  225  227  211  232  306  215  259
 16  244  224  210  230  228  240  153  193   42   79  193   76    2  360   74   74   36  189  206   51   70  136  170  190  143
 17  188  142   93  176  119   99   77   98   66   17  201  208  218  218  207  214  225  160  135  168  106   63  215  199  152
 18  122  231  207  215  173  201  195  109  191  196  199  208            225  228  242  223  228  265  279  292   10  322  219
 19  355  342  337  339  334  339  340  339  339  341   39  325                 278  269  227  212  212  153  230   80  107  322
 20  112  135  118   95  145  154  154  119  131  188  214  207  210  215  218  210  175  160  148  133  115  122  113  124  154
 21  155  153  148  115  121  105  104  127  160  206  203  201  203  216  198  194  190  132  147  151  158  144  163  178  162
 22  165  177  178   79  154  194  164  175  149  132                                                                      161
 23                                                              300  195  185  175  207  201  218  283  191  233  160  171  206
 24  183  213   17   96  161  174  146   81  150   79   57  147  224  224  208  206  200  183  177  123   78   92   77   76  146
 25 [illegible] 93 98 122  131  125  134  108  169  139  218  192  199  195  207       230  234  245  247  244  244   89  237  174
 26  219  219  213  217  216  250  199  215  184   27   35  290  323  286  308       326  247  222  177  244   97  109  114  230
 27   48   81  116  124  137  141  135  132  133   80  177  199  205  205  197  218  191  212  193  338  224  239  294  235  173
 28  154  335  324  335  320  307  305  303  303  317  329  332  338  339  344  343  335  313  287  275  274  282  251  236  309
 29  235  225  223  174  211  220  209  224   77  106   38  342  327  330  352    2  122  212  225  187  266  202  198  169  210
 30  254  237  242  158  232  214  173  201   87   57  332  210  180  120  197  206  165                                     198

MEAN 172.164,27 ,27 ,175.166.155.161.129, 90.155.221.239.240.225.229.220.209.205.206.196.196.128.181.

                    TOTAL NUMBER OF OBSERVATIONS =  3926     MEAN  =  186.
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DIURNAL VARIATION OF WIND DIRECTION AT 30 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	205	213	203	213	202	199	203	140	143	187		195	199	226	204	195	150	138	150	148	157	157	129	133	17
2	93	132	154	175	114	41	41	62	130	96	280	329	347	352	357	314	5	303	10	338	285	280	278	283	35
3	274	225	270	290	308	314	206	300	297	295	294	305	295	296	294	304	296	291	279	274	275	286	287	284	29
4	201	293	232	182	220	61	144	176	265	41	87	317	273	317	336	264	270	234	233	221	220	184	189	284	24
5	165	245	227	232	221	212	159	252	262	342	346	312	284	272	2	309	301	297	259	224	219	215	174	148	24
6	151	147	217	84	245	64	229	253	257	277	341	329	197	219	228	223	227	221	197	251	177	171	201	165	21
7	197	279	116	145	119	113	125	76	78	169	182	191	199	206	201	278	206	187	159	155	151	159	167	161	16
8	155	153	153	155	152	135	275	192	156	172	192	215	224	212	255	297	6	104	146	15	297	171	259	270	192
9	252	229	216	233	295	191	183	215	191	234		268	237	186	145	351	199	204	203	196	196	195	195	105	21
10	125	165	103	196	196	195	155	165	195	130	148	157	257	213	65	249	251	221	246	278	315	61	107	137	19
11	157	133	157	133	150	185	220	143	69	44	327	315	348	335	347	357	337	220	187	205	195	121	83	92	15
12	135	103	125	155	135	112	136	211	184	192	197		205	228	200	220	195	182	120	145	175	197	193	196	17
13	182	215	133	179	116	133	196	98	264	293	310	328	342	353	325	331	344	253	277	256	266	93	125	166	252
14	180	171	159	183	174	186	125	98	101	198	221	242	218	206	194	210	199	203	198	158	147	77	119	186	17
15	178	76	82	133	199	132	233	92	85	99	136	158	360	348	285	305	281	267	219	211	198	226	324	218	16
16	255	225	224	237	58	239	143	175	40	80	100	63	6	330	65	66	29	185	192	76	90	115	158	147	11
17	171	132	[illegible]	[illegible]	121	101	59	94	68	13	108	203	215	214	204	210	204	159	150	169	105	68	204	184	15
18	145	197	197	190	191	198	103	195	186	191	195	204	194	209	223	226	238	220	225	258	273	284	330	322	215
19	313	312	312	312	312	312	312	312	312	312	25	319			312	273	260	212	200	195	199	196	113	117	28
20	110	124	115	73	130	165	154	125	131	162	210	202	206	211	214	207	170	155	134	123	107	123	109	119	15
21	148	151	147	123	122	109	107	123	155	109	108	105	198	212	194	191	186	129	134	141	152	142	172	184	15
22	182	173	172	134	171	187	157	155	144	150	184	210	201	200	226	233	228	203	182	216	285	260	342	311	19
23	321	321	347	355	3	32	27	27	27	23	335	323	312	201	190	179	244	192	275	189	206	207	159	149	291
24	187	225	352	179	175	185	154	87	148	86	61	177	228	228	214	212	202	184	185	140	98	108	104	125	15
25	115	113	111	127	129	123	107	116	167	136	222	197	201	200	210		233	234	247	251	246	245	81	247	177
26	216	225	214	213	225	241	264	209	182	37	33	251	319	283	303		325	266	213	181	292	100	114	115	236
27	94	95	108	115	124	134	137	140	133	82	176	201	206	205	196	214	187	201	191	313	238	256	294	238	174
28	153	342	324	327	312	307	315	302	304	317	330	332	339	339	345	343	335	314	288	279	276	284	265	246	310
29	245	233	222	152	215	271	161	207	76	107	39	341	336	355	348	4	151	208	206	123	320	197	95	254	203
30	268	142	261	143	191	217	148	207	97	63	338	229	186	128	222	210	190								
																									187
MEAN	152.	157.	270.	272.	173.	193.	170.	153.	146.	122.	229.	249.	250.	239.	245.	252.	236.	212.	200.	202.	215.	179.	159.	188.	

TOTAL NUMBER OF OBSERVATIONS = 8369 MEAN = 197.

DIURNAL VARIATION OF [illegible]ND DIRECTION AT 100 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	190	223	202	224	180	151	195	143	137	176		186	189	193	192	184	136	128	137	125	149	149	127	120	168.
2	75	95	115	147	116	191	122	257	115	86	277	326	340	345	351	310	2	314	360	335	286	277	275	278	353.
3	274	282	285	291	302	309	275	296	292	289	290	298	290	290	289	297	291	286	276	271	274	284	284	281	288.
4	[illegible]	240	305	185	225	41	124	147	60	45	47	315	257	300	325	260	269	239	239	265	159	106	140	281	266.
5	72	287	234	[illegible]	293	5	155	181	306	347	351	309	269	276	354	306	296	308	297	250	320	17	59	90	304.
6	135	143	332	64	246	42	[illegible]	280	254	257	353	321	193	210	223	212	218	214	165	255	244	150	171	158	215.
7	[illegible]	135	94	127	118	111	142	144	101	155	169	179	187	198	191	197	194	172	144	128	125	143	150	135	149.
8	126	130	132	135	130	151	163	160	150	150	182	204	213	202	256	285	350	81	116	43	327	161	238	257	167.
9	246	219	64	316	345	334	159	215	197	234		259	208	156	135	356	123	164	153	158	158	158	158	157	184.
10	154	153	153	158	154	158	156	158	172	34	126	140	297	204	58	242	247	208	234	273	309	40	89	113	166.
11	124	113	131	130	132	144	151	137	81	43	337	311	339	329	338	349	330	28	140	191	186	163	150	127	113.
12	151	127	156	173	173	145	155	185	179	182	188		203	197	190	190	184	175	134	153	173	190	183	190	173.
13	191	129	131	175	135	175	221	329	284	284	302	324	333	345	317	323	349	290	308	292	349	71	91	124	296.
14	129	144	147	155	155	171	139	189	159	195	213	238	214	198	181	199	189	190	170	172	155	113	150	170	173.
15	176	144	116	109	132	114	197	74	76	83	118	153	360	343	284	301	275	281	229	218	201	234	298	249	182.
16	265	252	235	188	158	325	94	140	125	74	86	59	353	332	46	64	42	174	174	129	103	75	139	136	108.
17	143	124	139	113	148	115	115	98	83	92	189	195	207	207	196	203	195	167	158	163	122	98	188	163	150.
18	223	187	180	190	179	122	182	183	174	178	185	193	183	199	210	214	227	210	215	252	262	248	33	304	204.
19	320	223	9	234	175	35	117	134	284	75	18	320			305	264	252	209	197	187	161	173	152	129	205.
20	123	135	123	128	132	158	154	133	135	170	230	192	196	199	203	195	158	133	117	117	102	121	120	114	147.
21	119	134	145	134	122	108	114	132	154	194	190	187	190	205	168	183	159	114	121	132	143	142	163	169	152.
22	157	151	157	155	162	151	162	147	134	140	172	230	191	189	216	222	217	198	177	206	278	272	333	307	187.
23	313	315	339	348	2	2	297	343	309	360	330	318	311	200	165	159	189	177	178	159	291	150	77	144	303.
24	172	215	[illegible]	[illegible]	154	162	219	94	123	83	58	154	218	215	273	202	189	174	177	153	126	122	134	140	159.
25	125	115	115	124	115	114	172	120	157	130	213	187	189	189	200		222	223	245	248	241	241	330	263	178.
26	228	243	230	223	230	251	325	174	176	57	36	262	379	274	297		319	6	213	184	323	99	117	110	249.
27	[illegible]	125	115	[illegible]	113	124	122	133	123	77	169	187	197	184	187	205	196	188	187	326	262	326	299	283	162.
28	125	[illegible]	321	356	315	303	320	298	298	311	324	326	332	331	337	336	330	313	287	282	275	283	278	266	311.
29	255	243	223	229	7	[illegible]	174	326	44	121	37	338	329	350	337	359	22	290	169	118	349	179	48	335	351.
30	285	75	[illegible]	125	19	219	113	144	93	63	341	195	165	117	190	198	179								150.
MEAN	169.	158.	270.	271.	144.	133,	152,	156.	143.	111,	204.	243.	241.	229.	236.	242.	230.	201.	187.	196.	217.	153.	142.	175.	

TOTAL NUMBER OF OBSERVATIONS = 8363 MEAN = 181.

DIURNAL VARIATION OF WIND DIRECTION AT 200 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	217	225	224	221	216	211	214	173	164	199		204	207	210	209	201	157	151	162	142	170	173	151	142	189.
2	75	92	117	154	114	109	151	218	140	105	288	332	352	352	358	319	11	333	11	347	308	296	295	295	1.
3	293	293	311	325	316	324	313	311	307	304	304	309	304	303	301	307	302	299	292	284	293	300	297	298	302.
4	299	300	331	206	266	15	119	132	35	65	37	310	291	319	339	272	282	262	280	323	171	170	127	298	312.
5	53	61	329	329	4	48	30	148	124	15	356	336	299	285	2	315	306	330	325	302	360	38	77	134	3.
6	129	135	124	68	135	153	47	293	278	290	16	328	206	231	246	224	236	234	210	273	259	177	175	198	214.
7	183	193	131	174	162	172	182	187	175	181	189	201	207	220	211	216	213	194	166	150	146	165	164	150	181.
8	143	144	152	155	155	171	171	177	170	153	204	225	233	222	276	309	5	83	116	71	350	193	242	261	184.
9	284	345	44	345	4	47	163	249	270	266		277	233	136	142	1	34	116	116	116	116	116	116	116	93.
10	116	115	115	116	116	116	116	115	116	114	140	163	291	226	85	263	270	228	255	306	328	37	91	112	130.
11	124	179	127	135	134	148	157	165	112	62	356	325	345	333	347	356	339	28	129	214	211	205	211	197	131.
12	273	192	195	195	206	109	198	204	205	203	209		217	213	209	208	202	195	186	184	206	210	202	211	202.
13	218	219	181	272	159	211	274	311	279	291	307	325	342	355	321	331	358	318	331	316	14	58	83	104	308.
14	114	116	145	155	158	177	191	211	213	217	234	261	221	215	199	215	207	209	197	200	221	189	193	199	195.
15	202	254	169	158	110	122	216	94	67	74	134	172	360	352	297	305	283	302	257	260	216	268	277	321	231.
16	313	294	275	197	273	278	64	136	133	97	92	60	348	336	57	70	56	186	190	185	279	49	153	160	123.
17	173	159	194	145	125	177	168	156	146	213	204	209	220	218	210	217	210	192	194	184	169	188	212	188	187.
18	263	278	207	212	271	279	204	224	195	200	247	213	203	216	229	233	246	229	235	272	283	269	336	323	229.
19	342	325	325	325	325	334	336	336	336	331	31	329			321	281	258	224	221	200	183	194	195	178	297.
20	167	174	161	159	165	178	175	166	164	189	218	210	212	216	219	211	175	149	140	142	134	150	157	148	174.
21	130	154	172	153	152	142	153	162	191	203	204	202	204	218	203	197	178	136	148	156	165	173	187	190	175.
22	165	181	177	175	174	191	179	165	153	160	191	216	298	205	234	237	234	219	202	230	306	313	354	332	206.
23	330	331	354			357				357	342	339	326	237	171	175	207	193	189	179	215	199	10	9	285.
24	9	9	9	9	9	159	157	127	86	81	76	177	234	231	222	217	206	197	198	185	175	185	187	175	172.
25	153	151	153	149	139	136	131	157	177	152	229	205	208	207	218		241	242	275	274	262	262	312	279	203.
26	247	255	245	243	261	271	330	248	215	148	50	284	310	275	302		325	15	246	201	232	163	172	155	252.
27	155	173	153	141	155	146	146	163	151	107	207	205	213	209	205	239	213	215	205	298	329	350	314	17	189.
28	134	16	335	13	329	314	309	308	306	317	328	329	338	336	344	345	339	324	302	301	291	299	302	297	323.
29	291	258	255	257	22	154	221	41	43	124	52	343		356	346	2	17	38	93	115	133	203	304	15	13.
30	324	31	293	178	43	151	147	212	118	90	3	232	193	135	206	214	198								171.
MEAN	191.	180.	274.	273.	153.	166.	17[illegible].	182.	163.	155.	255.	259.	254.	249.	253.	259.	256.	222.	207.	222.	230.	198.	202.	199.	

TOTAL NUMBER OF OBSERVATIONS = 8293 MEAN = 210.

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 20 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
92	92	92	92	92	91	48	89	91	86	73	67	61	54	50		62	69	72	76	79	83	86	91	80
92	95	90	94	97	98	90	97	92	78	61	56	51	51	51	47	56	58	64	69	81	90	92	92	78
92	91	89	[illegible]	89	87	86	86	84	84	80	78	73	93	98	97	97	98	98	97	97	94	95	94	91
[illegible]	[illegible]	[illegible]	[illegible]	88	[illegible]	92	91	85	78	69	65	55	52	45	45	45	55	71	80	87	88	87	93	77
95	95	95	95	95	95	94	92	83	74	63		38	37	35	34	37	50	74	82	85	88	89	90	75
[illegible]	[illegible]	92	92	93	95	93	91	90	75	56	42	35	33	31	30	30	32	50	76	78	82	85	87	69
[illegible]	[illegible]	89	[illegible]	89	88	88	88	78	60	44	33	31	31	30	29	29	36	61	69	71	75	80	85	65
79	78	79	[illegible]	82	81	76	76	69	54	37	32	31	29	29	35	42	55	72	80	77	74	74	74	63
81	93	97	99	100	100	97	99	98	95	88	[illegible]	85	83	85	96	98	98	99	99	99	97	96	95	95
95	95	95	73	95	97	97	91	90	85	76	72	62	49	51	52	44	61	62	68	77	76	86	94	78
95	93	94	94	94	93	92	94	61	69	48	37	29	25	24	23	23	29	45	59	65	70	74	74	64
77	73	77	[illegible]	77	73	68	65	61	49	37	34	28	28	28	28	30	34	38	40	46	59	65	60	53
53	56	55	[illegible]	66	72	77	76	58	59	41	32	31	33	32	32	33	42	64	75	79	84	88	90	59
89	91	91	92	92	91	91	89	81	66	46	34	29	26	26	24	34	40	52	58	62	68	71	69	63
95	95	95	93	93	91	96	94	91	83	71	47	37	36	32	30	29	36	59	69	77	81	84	78	71
[illegible]	93	[illegible]	[illegible]	90	91	[illegible]	89	88	67	47	36	31	28	25	24	24	31	45	60	67	74	72	73	63
75	77	77	77	61	76	70	76	69	55	38	29	26	25	25	24	24	25	33	44	55	55	53	51	52
49	52	56	54	49	45	46	45	42	40	42	45	58	49	45	43	61	85	85	85	89	89	91	91	60
														37	34	34	41	53	67	73	75	78		56
78	73	77	78	78	84	[illegible]	76	67	54	37	28	25	24	24	24	24	26	32	34	38	39	39	43	50
47	44	43	46	48	46	45	44	42	33	26	24	23	23	23	23	23	30	41	49	51	55	54	44	39
39	37	42	53	67	75	67	54	55	38	33	31	29	28	28	29	30	35	46	59	72	85	93	98	52
[illegible]	97	92	87	88	91	95	95	91	88	87	78	62	59	58	57	73	87	87	87	88	88	87	85	84
84	95	86	87	87	[illegible]	87	85	80	73	64	48	38	33	32	32	39	63	78	78	77	75	73	73	69
73	72	[illegible]	[illegible]	71	72	65	59	57	44	32	28	27	25	25	25	26	28	35	57	71	72	74	80	53
82	83	81	83	85	85	86	67	80	68	51	43	38	34	30	28	28	33	42	57	68	73	75	78	63
72	73	75	77	76	75	74	66	58	47	34		30	22	22	22	22	25	29	33	44	49	57	74	50
81	93	93	[illegible]	[illegible]	[illegible]	91	94	94	88	83	79	74	61	51	48	47	46	45	47	50	64	80	82	74
88	89	89	[illegible]	83	86	85	84	80	73	63	47	42	41	38	36	37	46	63	74	76	79	80	82	69
82	83	87	85	85	85	85	86	77	61	57	43	35	32	30	30	30	35	47	50	60	62	66	66	61
81.	82.	83.	83.	84.	84.	84.	82.	77.	67.	55.	47.	42.	40.	39.	38.	41.	48.	58.	65.	72.	75.	78.	79.	

TOTAL NUMBER OF OBSERVATIONS = 8377 MEAN = 66.

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. = 21 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
	85	84	85	85	85	84	84	85	79	70	67	72	71	65	47	48	55	64	72	75	76	77	82	83	75
	84	84	84	84	84	84	84	84	84	80	61	54	54	50	47	49	53	57	62	71	81	84	84	83	72
	83	83	83	84	84	84	84	82	81	81	81	82	83	84	84	84	82	82	83	84	84	84	83	81	83
	78	79	81	82	82	83	83	82	82	78	61	56	53	48	44	44	42	51	65	79	82	82	82	82	70
	82	82	82	82	82	82	82	82	82	78	67		40	37	34	33	36	47	67	80	81				67
												45	34	31	28	26	26	29	40	65	79	63	82	82	49
	83	82	82	82	82	82	82	82	81	71	53	34	29	29	27	25	25	29	50	70	75	76	79	82	63
	81	82	82	82	84	81	82	81	68	52	38	31	28	28	26	34	40	51	69	76	78	77	74	74	63
	74	82	82	82	82	82	82	82	82	82	82	82	76	73	77	82	82	82	82	82	82	82	82	82	81
	81	81	81	81	81	81	81	81	81	81	75	71	60	44	44	39	35	45	54	48	54	66	79	81	67
	82	81	81	81	81	81	81	81	80	74	60	40	29	24	22	20	20	24	42	67	69	69	70	71	60
	79	80	78	75	75	71	67	66	59	47	35	29	25	25	25	25	26	33	41	46	50	53	54	54	52
	57	51	52	56	62	73	75	78	68	59	39	29	26	29	29	28	31	37	58	73	79	82	82	82	56
	82	82	82	82	82	82	82	82	80	73	65	44	29	23	22	24	28	37	46	51	54	60	64	64	59
	65	62	63	71	78	79	80	82	75	68	62	46	35	31	29	25	25	29	54	73	76	79	81	81	61
	83	81	81	81	81	81	81	81	81	74	55	39	30	25	22	22	22	25	39	62	69	74	77	77	60
	74	80	79	80	81	81	81	81	80	70	53	32	24	21	22	20	19	21	26	32	41	46	47	46	52
	41	45	47	47	44	42	41	41	36	36	36	41	48	43	40	39	57	81	80	78	75	80	81	81	54
	81	82	82	82	82	81	82	82	82	79	74	52	39	35	33	29	28	31	47	68	72	77	73	81	66
	77	81	[illegible]	81	82	[illegible]	[illegible]	75	65	48	34	27	23	22	20	19	20	23	26	30	33	37	37	39	48
	44	43	44	47	55	72	71	75	61	52	32	23	21	19	19	19	20	23	30	43	58	62	55	49	44
	72	75	77	81	[illegible]	[illegible]	75	73	73	62	41	20	25	24	25	25	26	31	42	58	70	78	81	81	58
	81	81	81	81	81	81	81	81	81	81	81	79	58	46	47	50	63	80	81	81	81	81	81	81	75
	81	81	81	81	81	81	81	81	81	76	68	57	39	32	31	30	34	57	77	74	73	74	73	71	67
	71	[illegible]	65	64	62	68	72	71	71	65	46	29	25	24											59
	83	84	83	82	84	84	84	84	81	66	49	40	35	31	27	25	25	27	37	61	71	76	78	79	62
	73	76	81	83	83	83	83	83	66	51	35	27	23	22	19	19	19	20	22	26	32	43	54	82	51
	83	84	83	83	83	78	77	83	83	82	77	67	60	53	45	43	43	43	41	44	45	48	56	78	65
	82	83	83	82	82	82	82	82	81	72	63														80
	82	82	82	82	82	82	82	82	82	78	64	51	39	32	28	28	29	33	39	45	62	69	73	74	62
MEAN	78.	77.	77.	78.	79.	79.	[illegible]	79.	76.	69.	57.	47.	41.	37.	35.	34.	36.	43.	53.	63.	68.	70.	72.	74.	

TOTAL NUMBER OF OBSERVATIONS = 8123   MEAN = 63.

DIURNAL VARIATI OF RELATIVE HUMIDITY
TRAILER NO. - 22 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

AY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	95	98	98	95	97	96	98	99	93	77	72	66	59	54	55	69	70	72	79	85	90	92	95	98	84
2	95	100	100	99	100	100	100	99	95	80	63	56	52	53	49	49									8
3										91	85	81	82	94	99	100	100	100	100	100	100	100	99	99	9
4	96	94	94	96	95	97	98	97	92	72		61	61	56	51	47	52	62	76	85	87	90	90	92	8
5	94	96	95	94	94	95	95	92	84	75	60	50	43	40	39	38	41	55	79	88	93	90	91	92	76
6	93	93	94	95	95	95	94	92	82	75	58	48	42	38	35	36	38	45	64	78	84	85	88	88	73
7	[illegible]	[illegible]	[illegible]	91	92	92	92	89	82	65	44	38	36	34	32	31	33	44	65	69	77	80	84	89	68
8	82	83	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	86	73	56		37	41	35	34	38	51	62	77	83	82	79	80	78	72
9	88	97	100	100	100	100	100	100	100	99	94	95	92	91	87	100	100	100	100	100	100	100	100	100	98
10	100	99	97	97	99	99	100	96	93	86	83	77	64	52	53	69	81	86	79	86	83	84	93	96	86
11	97	97	96	96	97	96	92	96	83	74	53	41	33	33	28	26	30	37	48	61	66	71	74	77	67
12	[illegible]	[illegible]	[illegible]	[illegible]	79	78	75	72	65	54	42	36	34	32	33	34	37	43	53	58	62	67	72	63	59
13	54	59	64	67	74	79	[illegible]	78	72	61	47	38	36	37	35	35	37	47	68	78	83	85	90	92	63
14	93	95	[illegible]	95	95	95	94	91	84	68	51	33	33	34	30	32	37	45	58	67	69	73	75	75	68
15	74	74	74	74	71	76	77	82	73	60		53	41	37	35	35	33	39	58	75	78	83	86	87	64
16	[illegible]	92	92	93	93	93	94	90	82	70	51	39	34	31	30	28	32	37	47	58	68	74	77	78	66
17	81	[illegible]	79	81	82	83	81	84	75	61	42	34	30	28	28	28	28	32	38	49	58	61	60	60	57
18	55	54	[illegible]	[illegible]	55	52	49	[illegible]	45	44	46	52	68	58	51	48		95	92	92	96	97	99	97	66
19	[illegible]	[illegible]	95	94	91	96	100	97	89	89	76	54	45	42	40	37	40	50	65	73	76	79	81	82	75
20	83	[illegible]	84	84	85	86	85	82	72	59	41	33	29	27	25	26	27	28	32	36	39	42	46	52	54
21	55	55	53	51	52	54	55	55	51	41	31	26	27	25	26	26	27	31	41	48	55	59	57	49	44
22	45	[illegible]	53	[illegible]	63	[illegible]	65	62	60	46	38	35	34	32	32	32	35	43	52	61	77	96	97	100	55
23	100	100	[illegible]	94	93	94	94	97	98	94	79	65	60	58	64	80	92	93	92	92	92	90	89	87	88
24	87	[illegible]	[illegible]	89	[illegible]	80	89	88	85	80	70	64	44	39	39	48	72	74	76	79	83	82	81	83	76
25	81	82	82	84	82	83	84	81	73	57	39	34	31	30	29	29	29	32	38	60	76	78	81	87	61
26	84	[illegible]	85	86	[illegible]	91	91	91	84	73	57	45	42	38	34	33	34	40	47	59	67	72	77	79	67
27	[illegible]	81	[illegible]	82	82	82	77	73	68	57	41	31	28	26	26	26	26	28	31	36	41	48	56	63	53
28	[illegible]	[illegible]	75	[illegible]	100	98	97	97	95	84	89	85	84	72	57	53	53	54	54	55	64	80	87	91	80
29	95	[illegible]	93	91	[illegible]	[illegible]	89	87	84	80	67	54	47	44	42	41	44	51	61	71	75	78	80	81	73
30	85	83	83	84	84	85	85	83	76	66	53	43	39	35	34	33	35	38	41	48	54	62	66		61
MEAN	84.	[illegible]	86.	87.	87.	87.	87.	86.	82.	70.	59.	51.	47.	44.	42.	44.	47.	54.	63.	70.	75.	79.	81.	83.	

TOTAL NUMBER OF OBSERVATIONS = 8316 MEAN = 70.

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 24 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	84	84	85	83	85	85	87	92	93	86	77	74	69	63	57	58	68	71							78
2													55	63	58	54	68	68	69	71	83	97	99	99	75
3	100	[illegible]	99	98	99	99	99	98	96	96	93	90	90	98	100	100	100	100	100	100	100	100	100	99	98
4	97	94	93	97	95	98	98	95	92	75	71	65	63	58	53	52	53	57	62	67	71	81	87	86	78
5	85	87	89	89	90	90	92	90	83	78	62	49	45	43	43	42	42	47	56	61	68	76	84	84	70
6	85	83	89	89	88	86	87	87	85	75	62	52	42	37	36	36	37	37	39	51	54	56	66	68	64
7	68	71	73	75	77	77	80	79	69	52	43	38	35	36	35	34	34	37	43	51	58	62	60	57	57
8	57	63	68	73	74	73	80	76	69	48	39	39	37	35	34	40	48	55	59	63	69	68	68	68	59
9	95	95	100	100	100	100	100	100	100	99	92	97	92	91	88	100	99	97	100	99	99	99	97	96	97
10	99	99	100	100	99	99	99	94	95	93	82	74	63	54	57	57	50	51	65	65	60	80	86	86	80
11	77	87	84	82	87	87	87	84	77	63	51	42	33	33	27	26	26	26	27	31	54	71	72	61	58
12	53	59	62	64	62	59	57	57	52	45	37	33	31	31	31	33	35	44	50	51	50	47	46	46	48
13	[illegible]	52	54	52	54	62	62	61	51	45	41	36	36	39	38	37	37	38	40	48	57	62	60	65	49
14	72	75	78	82	81	87	85	79	71	57	42	37	33	31	31	34	40	46	49	51	52	53	56	57	58
15	59	59	59	59	60	63	65	56	65	57	60	48		38	37	35	33	35	38	43	54	58	62	58	53
16	62	61	63	71	79	82	76	76	74	62	46	38	34	31	28	26	26	28	34	43	48	50	50	52	52.
17	58	55	58	59	59	59	60	60	54	45	37	33	31												52.
18													46	53	51	47	66	77	77	88	94	87	86	84	73.
19	73	72	72	72	82	93	98	96	98	91	73	53	46	44	41	37	35	35	38	49	63	70	73	70	66.
20	65	64	74	68	65	66	65	63	56	45	35	31	28	27	27	26	26	27	28	29	28	29	29	30	44.
21	31	31	32	32	31	31	32	32	31	29	27	27	25	26	25	26	26	28	30	31	31	31	31	32	30.
22	32	33	34	36	39	43	45	46	43	38	37	35	33	31	31	32	34	39	50	62	77	98	99	100	48.
23	100	100	99	95	93	93	93	95	97	82	77	75	60	58	59	60	64	75	79	77	79	78	76	77	61.
24	75	74	78	74	75	85	71	77	72	64	53	46	40	37	37	37	37	42	55	62	62	61	60	59	60.
25	57	55	55	55	57	54	53	49	45	41	35	32	31	31	29	26	29	32	34	37	38	40	43	46	42.
26	52	57	59	62	65	71	76	72	73	62	52	46	47	38	34	32	30	30	31	36	47	56	57	56	52.
27	55	54	57	56	55	54	52	49	46	42	34	29	25	25	25	25	25	25	26	28	30	33	37	63	40.
28	77	92	94	100	100	96	96	100	99	97	93	88	83	70	56	54	54	53	53	53	56	59	62	73	78.
29	33	37	[illegible]	93	95	94	92	89	85	75	61	50	46	44	42	41	39	39	41	49	59	61	61	64	65.
30	65	58	67	68	66	71	72	76	64	54	46	40	36	34	32	32	33	34	37	38	39	39	39	42	50.
MEAN	72.	73.	74.	75.	76.	77.	78.	77.	73.	65.	56.	50.	47.	45.	43.	43.	45.	48.	51.	56.	61.	65.	66.	67.	

TOTAL NUMBER OF OBSERVATIONS = 8075 MEAN = 62.

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 8 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	83	84	84	83	85	84	85	88	87	83	81	79	76	72	67	67	73	75	77	80	83	84	87	87	81
2	87	87	87	89	92	94	94	93	86	81	75	73	66	66	67	70	70	73	72	74	80	89	92	93	82
3	94	94	94	94	94	94	94	94	94	94	93	91	91	94	95	97	97	97	98	97	97	97	96	96	95
4	94	94	93	94	93	94	94	93	91	83	76	76	74	71	66	65	68	72	78	79	81	84	83	95	84
5	85	87	87	86	86	86	88	88	86	81	72	62	58	56	54	54	54	61	67	73	75	76	79	77	75
6	79	81	83	83	84	83	84	84	82	76	68	62	52	47	46	47	48	52	50	62	62	62	65	64	68
7	69	72	65	65	67	70	72	74	70	57	51	49	46	45	45	44	45	54	55	59	61	61	52	63	59
8	64	65	63	65	65	67	73	71	61	51	48	47	45	44	44	47	55	59	62	61	64	66	64	64	59
9	77	91	95	96	97	98	96	99	99	83		95	93	92	89	97	98	93	98	98	98	96	97	97	95
10	96	[illegible]	99	[illegible]	99	99	99	100	97	94	88	83	73	65	68	68	63	69	72	72	71	77	83	86	85
11	80	84	83	83	81	81	82	83	81	72	62	49	36	35	32	30	32	36	45	52	63	66	68	68	63
12	62	65	65	63	[illegible]	[illegible]	56	55	54	47	42		39	36	39	41	44	49	52	52	50	54	50	47	52
13	44	46	51	52	55	57	57	54	50	47	43	42	43	44	43	43	44	47	49	53	56	55	57	61	51
14	64	67	67	69	69	71	68	66	65	52	46	42	39	39	40	44	46	49	51	51	51	52	54	55	56
15	54	57	57	57	54	59	61	62	61	56	56	51	43	44	43	41	40	44	50	54	54	54	53	55	53
16	57	57	59	62	64	65	64	63	64	56	40	42	39	35	33	32	32	40	46	49	50	49	48	53	51
17	46	45	52	55	52	54	55	55	53	47	39	37	34	34	35	34	34	36	38	39	42	44	43	44	44
18	46	44	45	46	43	47	43	48	48	45	49	51	59	53	51	49	54	60	62	75	88	84	82	80	57
19	81	79	78	81	81	85	90	90	68	98	80	62			46	43	41	47	50	54	50	61	61	62	69
20	63	62	64	65	62	61	[illegible]	60	55	45	38	34	32	31	30	29	30	33	34	34	32	31	32	33	44
21	34	35	32	[illegible]	31	33	34	34	31	30	30	31	31	30	31	31	33	35	37	36	35	35	36	36	33
22	37	[illegible]	38	40	43	43	44	45	42	41						35	38	43	48	55	63	87	95	95	52
23	95	95	93	97	97	96	96	95	96	87	81	79	73	70	67	66	73	80	80	77	76	73	73	70	83
24	73	72	72	72	77	76	77	72	73	68	63	55	46	44	45	45	49	58	57	57	58	60	60	60	63
25	[illegible]	54	55	56	55	54	55	55	49	45	39	37	37	37	36		37	39	42	45	43	43	44	48	47
26	52	55	56	57	53	60	60	62	62	56	52	47	44	40	35		32	34	41	46	47	49	48	48	50
27	49	[illegible]	[illegible]	49	47	45	44	43	41	39	31	25	25		26	27	27	29	32	35	36	41	43	63	39
28	69	75	[illegible]	90	97	96	94	100	100	100	97	94	91	84	73	58	68	68	67	68	71	73	75	81	83
29	55	73	89	92	[illegible]	91	89	86	88	81	73	64	56	57	54	52	51	55	63	65	64	62	63	65	72
30	67	[illegible]	64	[illegible]	68	69	66	67	65	59	52	45	41	40	39	39	42								57
MEAN	[illegible]	[illegible]	71.	72.	72.	73.	73.	73.	71.	66.	60.	58.	54.	53.	50.	50.	51.	55.	59.	61.	63.	65.	66.	68.	

TOTAL NUMBER OF OBSERVATIONS = 8298 MEAN = 64.

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 30 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	85	85	85	84	86	86	88	89	89	84		79	75	72	67	67	73	76	78	81	83	86	89	89	82
2	99	[illegible]	[illegible]	[illegible]	99	99	99	95	92	84	76	74	66	65	66	70	70	73	72	72	82	93	97	98	84
3	[illegible]	100	100	100	100	100	100	100	100	99	98	97	96	99	100	100	100	100	100	100	100	100	100	100	10
4	96	[illegible]	97	98	97	99	99	97	96	85	78	76	74	70	65	63	66	68	74	74	75	75	77	100	84
5	85	83	84	81	83	84	85	86	87	83	72	60	55	54	52	51	51	57	63	66	67	68	72	74	72
6	75	74	75	81	83	82	80	83	82	77	69	62	50	45	44	45	45	48	53	56	57	57	58	58	65
7	57	[illegible]	61	62	65	66	71	70	69	55	48	45	44	44	43	42	43	47	51	55	58	59	59	58	56
8	54	[illegible]	[illegible]	[illegible]	61	61	67	63	59	48	46	46	44	43	42	47	55	59	61	62	65	65	64	66	57
9	79	97	100	100	100	100	100	100	100	100		100	99	99	95	100	100	100	100	100	100	100	100	100	99
10	100	100	100	100	100	100	100	100	100	99	92	86	74	65	67	67	59	60	71	70	67	77	85	87	85
11	84	82	82	[illegible]	78	77	77	78	80	72	61	47	33	31	27	26	28	34	32	45	61	64	67	64	59
12	62	63	62	55	55	54	52	52	50	44	39		37	36	37	40	43	48	51	51	50	49	48	48	50
13	[illegible]	47	49	51	55	56	52	50	46	45	42	42	42	45	44	44	44	45	46	51	55	57	58	60	49
14	61	61	64	62	65	68	65	64	63	51	45	42	38	38	39	43	48	50	51	50	50	52	54	55	54
15	54	[illegible]	56	57	53	[illegible]	61	61	62	58	58	52	44	43	44	41	39	43	46	47	47	49	51	52	52
16	53	54	55	50	61	63	65	61	63	59	48	42	39	35	32	31	31	38	44	47	49	48	47	47	49
17	[illegible]	[illegible]	[illegible]	52	52	53	55	56	54	48	38	36	33	33	35	33	33	34	37	38	42	44	43	45	44
18	45	45	45	47	[illegible]	49	45	50	49	47	53	53	64	55	54	51	57	64	67	81	95	89	84	81	60
19	82	70	76	74	81	80	97	97	96	96	85	64			40	41	39	43	47	50	56	57	59	60	70
20	52	61	61	62	61	58	57	55	52	44	36	33	31	30	31	31	31	33	34	34	31	32	33	34	43
21	35	34	31	27	31	33	34	33	32	30	31	33	32	32	33	33	34	36	38	37	36	37	38	38	34
22	[illegible]	[illegible]	[illegible]	42	45	46	46	47	45	43	42	41	39	38	38	36	41	47	54	62	71	97	100	100	52
23	100	100	100	100	100	100	100	100	100	95	88	85	80	76	72	73	77	81	77	72	74	70	68	65	86
24	[illegible]	75	65	69	66	69	[illegible]	67	67	68	63	55	45	43	44	44	47	53	55	56	57	60	60	58	60
25	54	55	54	55	54	54	54	54	47	43	38	36	35	35	34		36	39	42	45	43	44	45	49	45
26	52	55	57	54	61	62	64	63	63	60	55	54	46	41	34		31	31	36	44	47	49	49	49	51
27	[illegible]	[illegible]	51	51	49	40	45	43	41	39	31	25	24	25	25	27	27	28	30	34	36	41	44	69	39
28	70	64	[illegible]	100	100	100	100	100	100	100	100	98	94	83	70	64	62	61	60	60	64	65	67	75	83
29	79	62	64	66	86	89	86	85	85	78	70	60	51	51	49	47	45	45	48	54	56	54	54	57	66
30	[illegible]	[illegible]	62	62	63	52	62	60	58	54	47	41	37	36	35	35	37								52
MEAN	[illegible]	[illegible]	70.	71.	72.	73.	75.	72.	71.	67.	59.	58.	53.	51.	49.	50.	50.	54.	56.	59.	62.	64.	65.	67.	

TOTAL NUMBER OF OBSERVATIONS = 6392 MEAN = 63.

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 100 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	88	86	89	88	89	89	89	93	92	88		82	78	74	69	69	69	77	80	82	85	88	91	90	84
2	92	92	89	91	94	95	95	93	95	87	78	76	67	56	67	72	71	73	72	73	84	94	97	98	85
3	99	100	100	100	100	100	100	100	100	100	99	96	96	99	100	100	100	100	100	100	100	100	100	100	100
4	99	99	93	94	92	95	94	91	91	90	81	79	77	72	65	63	65	66	70	71	72	71	74	100	82
5	84	82	82	81	82	82	84	87	88	85	72	60	56	54	52	51	51	56	61	65	66	69	71	73	71
6	72	72	75	73	81	83	79	81	83	79	70	62	50	45	40	45	46	47	48	53	53	53	53	54	63
7	53	57	58	58	63	65	67	66	63	54	49	46	45	45	44	43	44	47	51	53	55	57	58	53	54
8	54	55	55	56	56	56	59	55	54	48	47	47	46	44	44	49	56	58	59	61	64	65	63	66	55
9	84	95	100	100	100	100	100	100	100	100		100	98	96	92	99	100	100	98	98	98	98	99	97	98
10	98	100	100	100	100	100	100	100	96	97	94	91	78	67	68	67	56	64	69	68	64	77	85	86	85
11	80	78	76	75	73	72	74	72	76	71	61	46	33	30	28	27	29	30	31	41	57	60	60	57	56
12	55	57	55	51	50	49	47	47	47	42	39		37	38	37	40	43	47	50	50	50	49	48	48	47
13	48	40	48	50	54	51	47	46	44	45	43	42	42	45	44	44	44	45	46	51	54	56	57	58	48
14	58	58	59	60	61	62	58	59	56	42	46	43	39	39	40	44	49	49	49	48	49	50	53	54	52
15	53	54	53	54	55	56	56	56	59	57	56	52	44	44	44	42	39	43	46	44	45	48	50	51	51
16	51	52	53	53	57	62	62	59	59	58	48	43	40	36	33	32	33	38	42	44	46	46	44	44	48
17	45	43	47	48	42	45	49	51	50	47	39	37	35	35	36	34	34	35	37	37	40	44	43	44	42
18	46	45	45	47	49	49	49	50	49	48	51	55	65	57	56	52	59	66	69	83	94	88	83	79	60
19	73	73	73	72	75	89	93	93	94	94	89	64			40	41	39	41	43	46	51	53	54	57	67
20	57	58	57	53	55	54	53	52	49	43	37	34	32	32	32	32	32	33	33	32	30	30	31	32	41
21	32	31	29	28	30	31	31	31	31	31	32	34	33	34	34	34	35	37	37	36	36	37	37	38	34
22	37	38	40	42	44	45	44	45	45	44	43	42	40	39	39	40	42	47	55	62	74	95	100	100	52
23	100	100	100	100	99	98	97	95	95	93	89	85	79	75	71	72	73	69	52	57	61	59	55	52	81
24	55	56	55	57	55	58	60	60	57	60	59	53	43	42	44	43	45	48	49	51	53	55	54	52	53
25	49	48	48	50	50	49	52	50	43	41	37	35	34	35	34		36	38	40	41	41	41	43	46	43
26	49	53	54	55	57	58	60	60	59	58	55	50	45	40	34		31	31	33	38	45	46	45	44	48
27	45	44	45	44	44	41	41	39	38	37	31	25	25	26	26	28	29	29	31	33	36	38	43	69	37
28	74	85	97	100	100	100	100	100	100	100	100	97	93	86	71	54	62	61	59	60	63	65	68	75	83
29	56	55	67	88	92	92	87	85	85	80	73	63	53	54	51	49	46	45	46	50	53	50	50	53	66
30	55	57	62	62	61	60	59	56	55	53	48	43	38	37	37	37	38								51
MEAN	66.	67.	68.	68.	69.	70.	71.	72.	69.	66.	62.	58.	54.	52.	50.	51.	50.	53.	54.	57.	60.	62.	63.	65.	

TOTAL NUMBER OF OBSERVATIONS = 8395 MEAN = 61.

DIURNAL VARAITON OF RELATIVE HUMIDITY AT 200 FEET
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	94	94	95	94	94	94	94	97	96	93		83	79	74	68	69	77	78	81	83	90	92	92	93	88
2	95	95	95	96	99	100	100	99	93	80	73	72	66	65	66	69	70	74	74	75	84	99	100	100	86
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	99	94	79	64	68	68	63	60	61	65	65	70	72	76	78	79	100	82
5	91	96	95	97	97	98	98	99	86	76	65	55	53	51	51	50	52	57	62	65	71	76	80	81	76
6	77	76	79	87	85	92	93	86	78	75	65	59	48	45	50	46	47	48	48	53	57	58	56	58	66
7	67	[illegible]	65	64	68	69	71	69	62	55	50	47	46	45	45	44	46	50	54	57	58	60	59	56	57
8	57	56	59	59	59	58	58	56	53	50	48	47	45	44	44	49	56	60	61	62	64	66	64	66	56
9	84	94	100	100	100	100	100	100	100	100		99	100	100	99	100	100	100	100	100	100	100	100	100	99
10	100	100	100	100	100	100	100	100	100	97	65	74	59	57	63	63	56	63	69	67	64	74	87	93	82
11	63	61	61	76	78	76	75	78	71	65	55	43	33	32	30	30	32	34	35	44	58	62	62	60	58
12	61	61	58	54	52	52	53	50	49	45	41		39	38	39	42	45	50	53	53	53	52	51	51	52
13	51	[illegible]	51	53	[illegible]	54	50	48	46	46	44	44	44	47	45	46	46	48	50	54	54	59	62	64	51
14	64	67	66	67	65	63	61	62	56	49	46	42	39	40	42	46	51	51	50	51	51	53	56	56	55
15	55	55	55	56	57	58	57	56	56	57	58	53	44	44	45	43	41	45	48	49	50	52	53	57	52
16	55	55	63	62	62	63	67	65	58	54	48	41	38	35	33	33	33	40	42	45	49	52	49	46	50
17	45	47	50	52	54	52	51	53	50	46	40	38	36	36	36	36	36	37	38	40	43	46	46	46	44
18	45	47	45	50	51	51	51	51	50	50	53	56	67	58	57	54	62	69	70	85	100	97	93	83	63
19	75	73	77	75	79	93	100	100	98	98	60	57			46	43	42	44	46	48	52	54	55	60	69
20	61	53	59	59	59	56	55	53	49	44	33	35	34	34	34	34	34	36	35	34	31	32	33	33	43
21	34	32	31	31	32	32	33	34	33	33	34	35	35	35	35	36	37	40	39	39	39	39	40	39	36
22	34	37	41	44	46	47	46	46	46	45	44	42	41	40	40	40	43	49	56	62	74	98	100	100	54
23	100	100	100	100	100	100	100	100	99	79	70	73	65	55	55	61	67	65	57	57	62	62	63	59	77
24	50	61	64	54	52	61	65	65	59	49	47	42	38	36	41	42	45	48	48	50	54	55	55	54	53
25	51	50	50	51	51	51	50	50	44	41	36	36	36	36	35		38	41	42	43	42	44	47	49	45
26	52	57	58	59	60	60	61	65	61	55	51	47	43	40	35		33	35	38	42	48	51	51	48	50
27	45	45	47	46	45	42	41	40	38	37	32	27	27	28	28	26	31	33	34	37	38	39	44	67	39
28	72	81	93	100	100	100	100	100	100	100	100	100	99	91	71	67	66	65	64	64	67	68	71	76	85
29	81	91	97	100	100	100	100	100	94	74	62	49		45	44	45	44	48	56	59	62	56	56	61	71
30	64	64	65	70	72	72	74	65	59	49	43	38	37	36	37	37	40								55
MEAN	69.	71.	72.	73.	73.	73.	74.	73.	70.	64.	57.	56.	53.	51.	50.	51.	51.	55.	56.	59.	62.	65.	66.	68.	

TOTAL NUMBER OF OBSERVATIONS = 8378 MEAN = 63.

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 20   PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	32	32	32	32	32	32	32	32	32	34	36	37	39	41	41		38	36	34	33	32	31	31	30	34.
2	29	27	25	26	27	26	25	26	29	35	39	39	40	41	40	42	40	39	37	35	31	29	28	29	33.
3	28	29	26	23	23	24	26	27	27	28	22	30	30	29	26	28	27	25	26	26	26	26	26	25	28.
4	24	24	24	24	24	24	24	24	24	25	29	31	33	34	36	35	34	32	29	27	23	23	23	20	27.
5	18	17	15	14	13	12	12	13	24	27	32		35	37	38	38	35	29	23	20	19	17	16	16	23.
6	16	14	13	12	12	11	11	12	15	24	32	37	38	39	41	41	39	33	25	22	19	18	17	15	23.
7	16	15	14	13	14	13	14	15	21	32	41	43	43	43	44	44	42	33	27	25	24	22	20	18	27.
8	21	20	20	19	19	17	16	21	26	36	46	47	47	47	46	43	42	35	29	26	27	29	30	30	31.
9	30	30	29	28	27	26	24	28	25	30	32	32	34	34	32	28	28	28	27	26	24	24	25	24	29.
10	24	24	24	24	24	24	24	25	25	26	28	31	34	35	35	35	35	32	33	31	29	28	24	21	28.
11	18	18	17	14	13	13	12	13	19	26	33	36	37	38	40	40	37	28	24	21	20	20	20	19	24.
12	20	19	15	16	14	19	21	22	25	28	40	43	44	42	45	44	43	39	37	37	33	30	28	31	31.
13	33	32	33	33	26	25	24	25	29	34	44	47	47	45	46	46	44	37	30	27	26	23	21	20	34.
14	19	17	17	17	17	18	17	19	25	33	42	46	47	48	47	45	42	39	35	33	32	29		28	32.
15	25	25	23	22	22	21	22	23	20	25	29	42	45	40	45	47	43	35	28	26	24	22	20	16	29
16	17	16	15	16	15	14	14	15	21	28	37	41	43	44	45	47	41	32	28	25	23	21	21	21	27
17	20	19	18	16	17	18	18	19	24	33	44	46	47	46	47	47	44	34	29	28	27	28	30	31	31
18	34	33	31	33	35	36	35	35	37	40	39	40	37	44	41	41	36	31	31	32	32	28	27	27	35.
19															34	34	32	25	20	13	17	16	16		24.
20	15	15	15	15	14	13	13	14	20	29	39	42	44	45	44	44	39	30	27	27	24	24	23	21	27
21	22	23	22	19	20	21	22	24	29	40	47	49	50	50	49	49	44	35	34	32	31	30	30	38	34.
22	37	38	32	27	24	22	27	34	34	46	47	48	48	48	48	46	44	39	36	34	34	32	28	27	37.
23	25	25	25	24	23	21	16	13	15	18	22	24	25	27	29	30	25	20	17	15	12	10	9	9	21
24	9	8	7	6	7	6	7	7	12	19	27	35	38	39	40	41	33	27	23	22	21	21	21	20	21
25	20	19	20	19	18	18	20	23	25	36	42	44	44	44	45	44	40	36	31	24	21	20	18	15	29
26	13	14	14	12	11	13	10	9	14	22	29	32	34	35	37	37	31	22	19	16	14	13	11	11	20
27	13	11	10	9	8	8	10	11	17	26	37		39	42	41	40	36	34	28	27	26	25	24	26	24
28	25	24	24	19	23	22	18	15	16	18	19	24	21	25	27	26	23	22	19	16	12	6	1	- 2	19.
29	- 9	- 9	-10	-11	-12	-14	-14	-13	- 8		10	17	19	22	23	24	19	11	6	3	1	0		- 2	3.
30	- 2	- 3	- 4	- 7	- 5	- 6	- 5	- 6	1	13	18	29	31	32	33	33	27	21	18	15	11	10	8	8	11.
MEAN	21.	20.	19.	18.	17.	16.	16.	15.	22.	29.	35.	38.	39.	40.	40.	40.	37.	31.	27.	25.	24.	22.	22.	21.	

TOTAL NUMBER OF OBSERVATIONS = 8341   MEAN = 27.

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 21 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	34	34	33	31	31	31	31	31	36	36	37	37	38	40	41	42	40	35	35	34	34	32	31	30	35
2	30	25	25	25	27	26	25	25	30	34	39	41	41	40	41	41	41	40	36	35	34	30	30	30	33
3	31	31	30	30	30	29	28	28	28	30	30	31	30	31	31	30	29	27	27	27	27	26	25	25	29
4	25	25	25	26	25	26	25	25	25	26	30	30	33	35	35	35	35	35	30	26	24	19	18	17	28
5	15	15	12	11	9	10	9	9	15	23	29		36	38	41	40	36	29	24	19	17				22
6												35	40	41	41	41	41	35	26	21	18	25	17	15	31
7	15	15	14	15	13	9	9	11	17	26	36	42	45	47	47	47	43	36	27	23	22	20	19	17	26
8	15	15	15	14	15	16	15	19	27	36	45	47	46	47	45	45	42	36	29	25	25	27	30	30	30
9	30	31	31	30	29	27	28	29	30	31	34	35	36	35	33	28	30	34	28	26	25	22	25	26	30
10	25	25	26	25	25	25	25	24	25	26	29	35	35	35	35	36	35	33	35	33	30	30	24	20	29
11	20	17	14	14	14	11	14	13	16	23	29	35	39	41	41	40	38	34	23	24	19	19	20	20	24
12	20	19	19	19	20	20	20	22	26	33	40	42	45	46	46	46	42	38	35	34	32	30	30	31	32
13	33	33	33	31	29	25	25	24	29	34	44	47	48	47	47	47	43	39	31	27	25	23	20	20	34
14	17	15	15	15	15	15	15	17	22	30	34	45	47	50	48	47	43	40	36	36	35	30	31	31	31
15	31	30	30	24	25	25	25	25	27	31	36	43	46	45	47	47	46	38	27	25	24	22	19	15	32
16	15	14	14	14	15	14	13	13	17	23	33	40	43	46	46	40	42	32	27	25	21	19	20	20	26
17	21	17	15	14	13	9	9	9	16	25	36	46	46	46	47	46	45	36	30	30	32	30	30	32	29
18	35	35	35	35	35	37	36	36	37	41	41	41	40	41	40	41	37	30	34	33	31	30	26	25	36
19	24	25	24	21	21	23	22	25	25	25	28	31	35	36	36	36	35	27	21	19	17	14	14	13	25
20	13	13	13	14	13	13	12	15	21	31	38	42	45	46	46	45	39	33	30	27	25	24	25	23	27
21	21	21	20	19	14	9	11	9	19	28	44	52	51	52	52	51	46	39	35	30	26	25	31	31	31
22	18	17	17	14	13	10	22	21	23	31	44	50	51	50	47	46	46	40	38	32	36	33	29	26	32
23	24	23	24	25	25	23	15	11	10	16	21	25	27	30	30	30	27	21	16	14	13	10	9	9	20
24	10	4	4	3	[illegible]		3	0	4	14	21	31	36	41	40	41	36	26	24	24	22	20	20	20	21
25	20	19	21	22	22	19	20	16	19	23	35	43	46	47											26
26	14	13	15	14	11	10	9	9	13	22	29	33	35	36	39	40	34	24	18	15	15	13	10	9	20
27	9	10	6	4	4	1	1	1	15	25	35	41	41	41	41	41	38	36	31	28	25	25	26	25	24
28	25	25	25	25	24	21	20	17	17	20	20	19	23	25	29	25	25	23	20	19	14	12	9		22
29	- 5	-10	-11	-11	-14	-16	-17	-17	-10	0	7														-11
30	- 6	-10	-11	-13	-15	-16	-15	-16	-11	- 1	12	22	31	34	36	35	29	22	20	17	10	9	5	1	7
MEAN	20.	19.	19.	18.	17.	17.	16.	16.	20.	26.	33.	39.	40.	41.	41.	41.	38.	33.	29.	26.	24.	23.	22.	22.	

TOTAL NUMBER OF OBSERVATIONS = 685   MEAN = 27.

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 22 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEA
1	33	33	34	33	33	34	33	33	35	39	39	41	43	44	43	40	40	39	36	35	33	33	33	32	37
2	31	32	29	30	30	32	29	29	32	38	41	42	43	44	46	45									36
3										31	32	33	33	32	31	31	30	29	29	29	29	28	29	28	31
4	27	27	25	25	23	26	26	27	28	30		35	34	36	33	37	36	33	30	29	27	25	25	23	30
5	21	19	19	18	17	16	16	17	22	29	34	36	38	40	40	40	36	30	25	23	22	21	20	19	26
6	18	18	17	15	15	15	16	18	24	28	35	37	39	43	43	42	40	34	26	24	23	22	21	21	27
7	19	18	16	18	17	16	16	18	23	33	42	44	45	46	46	46	41	34	29	28	25	25	23	20	29
8	24	23	21	21	22	19	18	22	29	39						46	43	38	32	30	31	32	32	33	30
9	32	31	27	30	33	30	27	30	32	31	35	34	35	35	36	30	30	33	30	29	27	28	27	25	31
10	26	26	26	27	26	25	27	27	28	28	34	33	36	38	36	36	34	33	33	32	32	31	27	25	3
11	22	21	21	20	17	16	17	17	21	25	36	38	40	41	42	41	34	29	27	24	23	23	24	22	27
12	22	21	21	21	21	21	22	23	27	34	42	43	46	45	45	44	42	38	35	34	32	30	29	33	33
13	37	34	33	31	29	27	27	26	31	37	44	49	48	48	49	45	45	38	32	30	29	27	25	24	36
14	23	21	21	20	21	20	21	22	26	34	43	43	49	54	49	47	44	40	36	34	33	31	30	30	33
15	31	31	31	31	31	31	30	29	32	38		44	47	48	48	47	45	38	31	28	28	26	27	14	35
16	22	21	22	19	19	17	17	19	23	30	39	44	46	47	48	44	37	34	31	29	26	24	23	28	30
17	22	22	22	21	20	20	20	21	24	33	43	48	49	48	48	48	43	35	32	30	29	29	30	31	33
18	35	36	35	35	36	37	39	38	40	43		41	38	41	43	43		33	33	34	32	31	29	29	37
19	24	23	25	24	25	25	24	25	26	27	30	33	35	35	36	36	31	26	23	22	21	19	18	18	27
20	17	15	15	16	15	15	15	16	21	29	40	44	47	47	46	45	40	33	29	26	26	24	22	20	28
21	[illegible]	21	22	22	21	20	21	22	27	39	49	51	53	52	52	50	47	39	36	35	32	31	33	37	35
22	37	35	31	30	30	31	31	30	34	45	48	49	53	52	49	46	45	39	39	38	36	32	30	29	39
23	28	27	25	25	25	24	20	14	15	19	24	27	26	34	30	27	23	21	18	16	14	13	12	12	22
24	11	10	10	9	13	10	10	10	12	16	27	33	39	40	41	35	31	28	27	24	22	22	21	20	22
25	[illegible]	19	19	16	13	17	17	19	23	34	43	46	46	47	47	46	42	38	33	26	24	23	21	18	30
26	18	17	17	14	13	12	12	12	16	22	30	34	36	37	38	36	30	25	23	20	18	16	14	13	22
27	13	13	12	10	10	9	11	12	15	24	38	42	42	44	43	41	37	32	30	29	28	27	27	26	25
28	28	27	27	26	25	24	21	19	19	21	22	22	22	25	29	29	25	22	20	17	13	5	2	0	21
29	3	5	7	8	9	11	11	9	6	1	12	18	22	24	25	24	17	14	10	7	6	4	3	2	11
30	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4	0	5	14	25	33	32	34	34	33	28	25	21	18	15	12	11		15
MEAN	23.	23.	22.	22.	21.	21.	21.	21.	24.	31.	36.	39.	41.	42.	42.	41.	37.	32.	29.	27.	26.	25.	23.	23.	

TOTAL NUMBER OF OBSERVATIONS = 8277 MEAN = 29.

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                            DIURNAL VARIATI   OF TEMPERATURE(DEG F)
                      TRAILER NO. - 24  PERIOD(11/ 1/74 TO 11/30/74)

                                         HOUR
      1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
AY





V     0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.  0.
```

DIURNAL VARIATION OF TEM[illegible]RATURE AT 8 FEET(DEG F)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	35	34	34	35	34	34	33	33	33	36	37	38	39	41	42	41	39	36	34	33	32	33	32	32	3
2	32	31	31	34	34	29	26	30	33	37	39	40	40	42	42	41	39	38	37	35	33	31	31	30	3
3	29	29	24	27	23	28	28	27	28	28	29	32	31	30	30	29	28	28	27	28	27	27	27	27	2
4	25	25	25	24	25	24	25	25	26	29	31	31	32	35	36	35	35	33	31	30	29	27	26	26	2
5	25	22	22	21	22	21	21	22	25	29	33	34	37	37	37	38	36	32	29	27	26	25	24	25	2
6	25	23	21	22	21	21	19	21	25	30	34	35	42	40	40	40	39	34	29	28	29	27	25	26	2
7	26	27	25	26	25	25	25	24	34	39	41	42	43	44	45	44	43	37	34	33	32	32	31	31	3
8	[illegible]	[illegible]	[illegible]	29	28	27	23	28	36	43	45	46	47	48	46	45	41	38	35	36	33	34	34	34	3
9	33	32	31	31	32	31	30	31	31	33		32	34	34	35	30	30	30	30	29	28	26	26	25	3
10	25	26	27	27	26	27	25	26	27	28	30	33	35	35	36	36	35	33	33	33	31	29	28	25	3
11	26	25	23	21	22	21	20	20	25	30	33	36	37	39	40	39	38	34	28	28	28	29	27	27	2
12	27	25	26	27	27	27		31	34	38	42		42	44	44	44	42	35	36	36	37	37	38	38	3
13	34	36	37	33	34	32	32	34	39	43	47	47	47	45	46	45	44	40	39	35	36	35	32	29	3
14	28	27	28	27	29	27	29	28	33	41	44	45	47	46	47	44	42	40	38	38	37	35	35	36	3
15	36	33	35	35	35	34	31	31	34	39	40	44	46	45	46	40	45	40	35	33	32	32	32	31	3
16	29	24	27	24	25	25	25	26	26	34	38	41	43	44	46	46	45	39	34	33	33	33	32	31	3
17	31	31	29	29	32	28	27	26	33	40	44	45	47	47	47	47	43	39	37	37	34	33	38	38	3
18	37	36	33	38	37	38	37	37	38	41	40	41	38	41	41	41	38	36	36	34	31	31	31	31	3
19	29	29	29	24	25	25	26	25	26	27	34	32			35	36	35	29	27	25	25	24	24	24	2
20	23	23	22	22	24	25	25	25	31	37	41	44	45	46	45	43	40	36	34	33	33	32	32	31	3
21	31	31	32	34	32	31	30	33	40	45	48	50	51	51	50	49	47	43	41	41	42	42	42	42	4
22	41	41	39	39	36	38	37	38	43	44						47	44	40	38	36	34	31	30	29	3
23	[illegible]	27	26	25	24	24	23	22	22	25	25	27	28	29	30	30	28	23	19	20	20	21	20	21	2
24	19	14	20	19	16	13	21	22	24	29	32	37	39	39	40	40	37	31	30	30	28	27	27	27	2
25	24	27	27	26	29	22	28	29	35	39	43	44	43	43	45		40	38	35	32	32	31	30	25	3
26	24	25	23	23	22	22	21	19	23	28	30	32	35	37	38		35	30	25	25	26	24	25	24	2
27	22	22	21	22	22	23	23	24	27	32	38	40	41	42	41	40	38	36	33	32	32	30	29	28	3
28	[illegible]	[illegible]	26	26	25	25	20	20	20	21	22	22	23	25	28	26	24	22	20	17	16	15	11	8	2
29	7	5	3	5		4	3	2	5	12	17	19	22	24	25	25	24	19	14	15	15	14	13	13	1
30	12	13	11	13	11	11	12	12	16	22	27	31	32	34	35	33	30								2
MEAN	28.	28.	27.	27.	27.	26.	26.	26.	29.	34.	36.	37.	39.	40.	40.	40.	38.	35.	32.	31.	30.	30.	29.	29.	

TOTAL NUMBER OF OBSERVATIONS = 6299 MEAN = 32.

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                 DIURNAL VARIATION OF TEMPERATURE AT 30 FEET(DEG F)
                       TRAILER NO, - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                               HOUR
        1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24 MEA
DAY

  1    34  35  34  34  34  34  34  38  33  35      37  38  39  40  39  38  35  34  33  33  33  32  32  35
  2    31  31  31  31  30  29  29  31  32  35  39  38  39  40  40  40  39  37  36  35  33  31  31  30  34
  3    29  29  29  29  29  28  28  27  27  28  29  29  30  30  30  29  28  28  28  27  27  27  27  27  29
  4    25  25  25  24  25  24  24  25  26  28  30  30  31  34  35  35  34  33  32  32  31  30  29  26  29
  5    26  25  25  25  24  23  23  22  24  29  32  33  35  36  36  37  36  34  31  30  30  29  27  28  30
  6    28  27  24  23  23  23  23  23  25  29  33  34  38  39  39  39  38  35  33  30  30  30  28  28  30
  7    28  28  28  28  27  26  27  27  29  37  40  41  41  42  43  42  41  39  36  35  33  33  33  34  35
  8    33  32  32  31  31  30  27  32  36  42  43  44  45  45  45  43  41  38  36  36  34  35  35  35  37
  9    33  31  31  32  30  30  31  32  33  32      32  33  33  33  30  30  31  30  30  29  27  27  27  31
 10    25  27  27  27  27  27  25  26  26  27  29  31  33  34  34  35  35  33  33  33  31  30  28  28  30
 11    27  27  25  24  24  24  23  22  25  29  32  35  35  38  38  35  38  36  34  31  30  30  29  29  31
 12    29  28  30  29  29  30  31  32  34  33  41      42  43  43  43  41  38  36  37  37  37  38  38  36
 13    39  37  37  36  35  35  35  36  39  42  45  46  45  44  45  44  43  41  41  37  36  35  33  32  40
 14    32  31  31  32  32  33  31  31  33  40  42  43  45  46  45  43  41  40  38  38  37  36  36  36  37
 15    37  35  35  35  34  33  33  30  34  38  39  42      44  44  45  44  41  38  38  36  35  33  34  38
 16    33  32  32  31  27  27  25  28  29  33  37  39  41  42  44  44  43  40  37  34  34  34  34  34  35
 17    33  33  31  31  31  32  30  30  32  39  43  44  45  44  45  45  43  40  37  38  35  34  38  36  37
 18    37  39  39  38  37  38  37  37  38  40  39  39  37  40  40  40  38  36  36  34  32  32  31  31  37
 19    30  30  29  27  26  25  25  25  26  27  29  31          28  35  34  31  29  28  27  27  27  26  29
 20    25  26  25  24  26  26  27  27  30  36  39  41  42  43  42  42  40  38  35  35  35  34  33  33  34
 21    33  33  35  36  34  32  32  34  39  44  46  47  48  48  48  48  46  43  42  42  43  42  42  42  41
 22    42  41  40  40  39  39  39  39  42  44  46  47  47  48  47  45  43  40  38  36  34  30  30  29  41
 23    28  27  27  26  25  24  23  23  23  25  26  26  27  28  29  29  28  25  24  23  22  23  23  23  25
 24    22  21  23  22  24  23  23  23  25  28  32  35  37  38  39  39  37  33  32  31  30  29  29  30  30
 25    31  29  30  29  30  30  29  30  36  39  42  43  43  43  44      40  38  36  33  33  32  30      35
 26    27  27  26  25  25  24  23  24  24  27  29  31  33  35  36      36  33  30  28  27  26  27  26  29
 27    24  24  24  24  24  25  25  26  28  32  37  39  39  41  40  39  38  36  35  33  32  30  29  28  32
 28    26  27  25  25  25  24  21  20  20  21  22  22  23  26  25  27  25  23  22  19  18  16  14  12  23
 29     8   9   9   9   7   8   6   6   5  12  17  20  23  24  25      24  23  21  18  17  17  17  16  15
 30    16  15  14  15  15  14  14  15  17  22  27  30  31  33  34  33  31                              22

 MEAN  30. 28. 29. 28. 28. 26. 27. 28. 29. 33. 35. 37. 38. 39. 39. 39. 37. 36. 34. 33. 32. 31. 30. 30.

                 TOTAL NUMBER OF OBSERVATIONS =  8362     MEAN  =   32.
```

DIURNAL VARIATION OF TEMPERATURE AT 100 FEET(DEG F)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	35	35	35	34	34	34	34	33	33	35		36	37	38	39	39	34	36	35	34	33	33	33	32	35
2	32	32	33	32	31	30	31	31	32	35	38	38	40	40	40	39	38	38	37	36	33	31	30	30	35
3	29	29	27	28	28	28	27	27	27	27	28	29	29	29	29	28	28	27	27	27	27	27	27	26	28
4	25	25	25	24	25	24	25	25	26	27	29	30	31	33	34	35	35	34	33	33	32	32	30	26	29
5	27	27	25	25	24	24	24	23	24	29	32	33	35	35	36	37	37	34	32	31	30	29	28	28	32
6	29	28	25	24	23	23	23	23	24	26	33	34	38	39	34	39	38	36	35	32	31	32	30	30	31
7	30	29	30	29	28	28	29	29	31	37	39	41	41	42	43	43	42	40	38	36	35	34	34	36	36
8	35	34	34	33	33	33	32	35	37	41	43	44	45	45	45	44	42	40	38	37	35	36	37	37	39
9	34	32	31	31	31	31	31	32	32				33	33	34	30	31	32	31	31	30	29	29	29	32
10	28	27	28	28	28	27	26	26	26	26	28	31	33	34	35	35	35	34	33	33	32	30	29	29	30
11	29	28	27	25	25	25	24	24	25	29	32	34	35	37	38	39	38	37	36	34	32	32	32	31	32
12	30	32	31	31	31	31	32	33	35	37	41		42	43	43	43	42	39	38	37	38	38	38	38	37
13	42	40	39	37	35	33	36	38	40	42	45	46	46	44	45	45	44	43	42	38	38	35	34	34	41
14	34	34	34	34	34	33	33	33	36	40	42	44	46	45	46	44	42	40	39	39	39	38	37	37	39
15	38	37	36	37	37	35	35	34	35	38	39	42	45	45	45	45	45	43	41	40	39	36	34	35	39
16	34	33	33	33	32	28	28	29	30	33	37	40	42	43	44	45	45	42	39	37	36	36	37	37	37
17	35	35	34	33	34	33	33	33	34	39	43	44	45	45	45	45	44	41	39	39	37	36	39	38	39
18	38	39	39	38	37	38	37	35	37	40	39	39	37		40	40	38	36	36	34	32	32	32	32	37
19	31	30	30	29	27	25	25	25	25	26	29	30			29	35	35	33	31	31	29	29	29	28	30
20	28	27	26	27	25	27	27	28	30	35	39	41	42	43	43	42	41	39	37	37	37	36	35	34	35
21	35	35	35	36	36	34	35	36	40	44	46	47	48	46	48	48	47	45	44	44	44	44	43	43	43
22	42	43	42	41	41	41	42	42	42	44	46	46	47	48	47	46	44	41	39	37	34	31	29	29	41
23	27	26	25	25	24	24	24	23	23	24	26	26	26	27	28	29	29	28	29	25	24	24	25	26	26
24	25	25	25	24	25	25	24	24	26	28	31	36	37	38	39	40	38	35	34	33	31	31	32	32	31
25	32	31	32	31	32	32	31	32	36	39	42	43	42	43	44		41	39	37	35	34	32	31	30	36
26	28	27	27	26	25	25	24	24	25	27	29	31	33	35	36		36	34	33	31	28	28	29	28	30
27	27	27	26	25	25	26	25	27	28	31	37	39	39	41	40	39	38	37	36	34	34	32	30	28	33
28	28	26	25	26	25	24	23	18	18	19	20	22	21	24	27	26	24	22	21	18	17	15	13	12	22
29	8	9	8	8	7	7	7	7	5	10	15	18	20	23	24	24	24	23	22	20	18	18	18	17	15
30	17	16	14	15	16	15	16	16	17	20	26	29	31	32	33	33	31								23
MEAN	31.	30.	30.	30.	29.	29.	28.	29.	30.	33.	35.	36.	38.	39.	39.	39.	38.	37.	35.	34.	33.	32.	32.	31.	

TOTAL NUMBER OF OBSERVATIONS = 8362 MEAN = 33.

DIURNAL VARIATION OF TEMPERATURE AT 200 FEET(DEG F)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

HOUR

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	ME
1	35	34	34	34	34	34	34	33	33	35		36	38	39	41	39	37	35	34	34	33	33	33	33	3
2	32	32	32	32	31	32	30	31	35	38	40	40	41	41	41	41	39	38	37	36	34	31	30	29	3
3	29	29	28	25	28	28	27	27	27	27	28	29	29	29	29	29	28	27	27	27	27	27	27	26	2
4	25	25	24	24	25	24	24	25	28	33	36	33	34	37	37	35	34	33	32	31	30	29	29	26	3
5	24	23	23	22	22	21	22	23	29	33	37	36	37	39	38	38	37	34	32	30	28	25	25	26	3
6	27	27	25	23	23	21	22	24	27	30	35	35	40	40	41	40	39	36	35	32	29	30	30	29	3
7	30	25	25	26	27	27	28	29	33	38	40	42	42	43	43	43	42	39	37	35	34	34	34	35	3
8	35	34	33	33	33	33	33	36	38	42	44	45	47	47	45	44	42	39	38	36	36	36	37	37	3
9	34	32	32	31	31	31	31	31	32				35	34	35	31	31	30	30	30	28	28	27	27	3
10	27	27	28	28	27	27	25	26	27	30	33	36	40	38	35	36	35	34	33	33	32	30	28	27	3
11	27	27	25	25	24	25	24	23	28	33	36	38	38	39	40	40	38	36	34	34	33	32	31	31	3
12	30	31	31	31	31	31	32	33	35	37	41		43	43	43	43	42	39	37	37	37	37	38	38	3
13	35	34	36	37	35	35	36	38	41	42	45	46	46	44	45	45	45	42	40	38	36	34	32	31	4
14	32	31	31	33	34	34	32	33	37	42	44	46	47	47	46	44	41	40	40	39	38	37	37	37	3
15	36	37	35	37	35	35	35	36	36	39	40	43	42	46	45	46	45	43	40	38	36	35	33	32	3
16	34	32	30	29	29	28	25	28	33	36	39	43	45	46	47	48	46	42	41	37	34	32	35	36	37
17	35	34	33	32	31	32	32	33	36	41	43	44	46	45	46	46	43	40	39	38	37	35	38	37	39
18	38	39	39	33	37	37	37		38	40	39	39	36	39	40	40	37	35	35	33	31	31	30	31	37
19	31	30	28	28	27	25	25	26	25	27	32	33				35	35	32	31	31	31	30	29	27	30
20	25	27	27	27	27	29	24	29	31	36	40	42	43	44	43	42	41	38	36	36	36	36	35	35	35
21	34	35	35	37	37	35	35	36	40	44	46	47	48	49	48	48	46	43	44	44	44	43	42	42	42
22	43	42	42	41	41	40	42	42	42	45	46	47	48	48	47	46	44	40	38	37	34	31	30	29	41
23	28	25	26	25	24	23	23	22	24	30	30	28	32	36	35	32	29	27	27	27	23	22	21	25	27
24	24	22	23	22	24	25	23	22	29	35	39	42	41	41	41	41	38	35	34	33	31	30	31	32	32
25	31	31	31	31	31	31	31	32	37	39	43	43	43	43	44		41	38	37	35	34	32	36	30	36
26	26	25	25	25	26	25	24	22	26	30	32	34	35	36	37		36	33	29	29	27	26	26	27	29
27	25	25	25	25	26	27	27	27	30	33	38	40	40	42	40		38	36	35	34	33	32	30	28	33
28	20	27	25	25	25	24	23	19	19	20	20	21	21	25	28	25	24	22	21	19	17	16	14	13	22
29	0	10	6	7	4	2	4	5	10	15	22	25		30	29	28	26	19	16	16	15	17	17	15	16
30	14	14	13	13	12	11	13		19	25	32	35	35	35	36	34	31								24
MEAN	30.	30.	29.	29.	28.	28.	28.	29.	31.	35.	38.	38.	40.	40.	41.	40.	38.	36.	35.	34.	32.	31.	31.	30.	

TOTAL NUMBER OF OBSERVATIONS = 8318 MEAN = 33.

HOURLY TOTAL SOLAR RADIATION(LANGLEY)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOT
1	0	0	0	0	0	0	0	0	0	4	5	9	22	35	33	14	3	0	0	0	0	0	0	0	125
2	0	0	0	0	0	0	0	0	15	31	36	22	14	12	5	12	0	0	0	0	0	0	0	0	147
3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	2	0	25	38	34	28	34	11	0	0	0	0	0	0	0	0	0	172
5	0	0	0	0	0	0	0	6	17	35	47	14	43	26	18	5	0	0	0	0	0	0	0	0	211
6	0	0	0	0	0	0	0	3	8	27	19	26	37	25	10	11	2	0	0	0	0	0	0	0	168
7	0	0	0	0	0	0	0	0	10	24	36	35	35	35	24	10	5	0	0	0	0	0	0	0	217
8	0	0	0	0	0	0	0	0	10	23	30	30	32	37	10	10	0	0	0	0	0	0	0	0	182
9	0	0	0	0	0	0	0	0	0	0		6	7	7	10	0	0	0	0	0	0	0	0	0	30
10	0	0	0	0	0	0	0	0	0	3	13	38	37	20	2	0	0	0	0	0	0	0	0	0	113
11	0	0	0	0	0	0	0	2	18	32	35	36	36	34	23	9	0	0	0	0	0	0	0	0	225
12	0	0	0	0	0	0	3	0	4	13	24		17	16	8	9	4	0	0	0	0	0	0	0	98
13	0	0	0	0	0	0	0	0	6	19	34	27	16	13	18	0	0	0	0	0	0	0	0	0	133
14	0	0	0	0	0	0	0	0	9	20	27	32	35	18	3	0	0	0	0	0	0	0	0	0	144
15	0	0	0	0	0	0	0	0	1	4	9	15	16	12	13	6	0	0	0	0	0	0	0	0	76
16	0	0	0	0	0	0	0	0	7	20	30	35	35	32	22	8	0	0	0	0	0	0	0	0	191
17	0	0	0	0	0	0	0	0	7	20	21	32	34	20	20	9	0	0	0	0	0	0	0	0	163
18	0	0	0	0	0	0	0	0	0	11	6	12	4	3	4	0	0	0	0	0	0	0	0	0	40
19	0	0	0	0	0	0	0	0	0	4	31	39			5	5	0	0	0	0	0	0	0	0	84
20	0	0	0	0	0	0	0	0	6	19	29	36	36	31	20	7	0	0	0	0	0	0	0	0	184
21	0	0	0	0	0	0	0	0	6	19	29	34	36	29	16	4	0	0	0	0	0	0	0	0	173
22	0	0	0	0	0	0	0	0	7	8						6	0	0	0	0	0	0	0	0	21
23	0	0	0	0	0	0	0	0	5	13	16	11	20	38	29	3	0	0	0	0	0	0	0	0	135
24	0	0	0	0	0	0	0	0	12	25	36	36	36	27	19	6	0	0	0	0	0	0	0	0	197
25	0	0	0	0	0	0	0	0	1	15	25	30	31	24	18		0	0	0	0	0	0	0	0	145
26	0	0	0	0	0	0	0	0	5	17	25	36	36	29	20		0	0	0	0	0	0	0	0	168
27	0	0	0	0	0	0	0	0	3	15	23	30	22	24	13	3	0	0	0	0	0	0	0	0	133
28	0	0	0	0	0	0	0	0	0	11	15	13	13	14	15	2	0	0	0	0	0	0	0	0	83
29	0	0	0	0	0	0	0	0	10	24	43	45	30	26	19	6	0	0	0	0	0	0	0	0	203
30	0	0	0	0	0	0	0	0	5	17	24	36	27	27	19	6	0								161
TOTAL	0.	0.	0.	0.	0.	0.	3.	11.	172.	499.	707.	751.	737.	649.	427.	151.	14.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 8303   TOTAL = 4121.

```
                    TEMPERATURE CHANGE F  M 30' TO 100' (DEG F*10)
                     TRAILER NO. - 23  PERIOD(11/ 1/74 TO 11/30/74)

                                                  HOUR
           1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24
DAY

  1        6   5   5   5   6   6   6   8   6   2       0   0  -1  -2  -1   1   4   7  11  11   8  10  11
  2        9  11  12  13   8   7  14  11   0   0  -2  -1   0   0   0  -3   1   3   4   7   5   2   2   1
  3        1   1   1   1   1   1   0   0   0   0   0   0   0   0   1   2   1   3
  4                    4   5   5   6   6   3  -1  -1   0   0   0   0   1   1   5  11   9  15  16  19  18
  5       13  15  21  17  13  21  16  14   4   0   0   1  -2   0   0   0   1   8  15  12   9   7  17  13
  6       14  17  25  24  13  14  25  19   2   0   0   1  -1  -2  -1  -1   0  17  26  17  22  27  28  21
  7       25  15  19  23  23  25  25  29  22   0  -2  -3  -3  -3  -3  -1   2   8  16  18  19  13  16  26
  8       25  27  22  23  31  34  52  39  11   0  -2  -3  -3  -4  -1  -3   0   9  18   6  10   8   9   8
  9        1   2   2   1   2   2   2   2   3  -1      -2  -1  -1  -2   1   2   5   8  12   9  17  13  21
 10        5   4   7   0   5   3   0   0  -2  -4  -6  -7  -9  -5  -2  -1   1   2   0   1   4   2   6   8
 11       15  11  22  17  15  16  16  24   1  -5  -4  -5  -4  -5  -4  -3   0   6  17  39  25  16  27  21
 12       19  33  29  19  16  15  15  12   4   0  -2       0  -2   0  -1   0   5   7   4   3   3   2   3
 13        6   5   9   7  11  25  31  21   5  -2  -5  -4  -3  -2  -3   0   0   6   5   9   7   2   4  15
 14       21  30  29  23  29  34  25  24  23  -3  -6  -7  -7  -6  -3  -2   0   4   8   6   6   8   6   6
 15        9  10  13  12  14  10  15  15   9  -1  -3  -8  -5  -5  -6  -5  -2   5  10  21  22   8   7  13
 16       15   9  15  17  29  15  16  13  10   0  -5  -7  -6  -7  -7  -4  -1  12  22  22  14  13  20  20
 17       24  19  23  25  25  25  32  31  12  -3  -6  -5  -9  -7  -7  -6  -1   4  11   8  10  12   5  13
 18        5   3   4   4   1   0   0   0   0  -4  -3  -6  -4  -3  -5  -3  -1   0   0  -1   0   3   3   4
 19        5   2   5  19  11   2   0   0  -1  -4  -5  -5          -2  -3   0  24  21  26  24  23  18  19
 20       23  18  20  27  23  14  13  13   4  -4  -6  -6  -7 -18 -20   0   6  12  22  22  21  20  20  22
 21       31  29  24  24  22  27  31  23   8   0  -2  -2  -3  -4  -2   0   3  11  19  15   9   9   9   8
 22       11  11  17  16  18  19  25  25   3   0  -1  -4  -5  -4  -2  -1   2   7   8  10   4   7   5   5
 23        5   5   6   7   9   8  12  11   9   0  -1   0  -2  -2   0   0   7  30  60  33  32  26  36  39
 24       45  47  35  39  32  35  26  20  26   3   0  -1  -1  -1   0   0   8  19  23  18  21  28  28  23
 25       20  27  30  25  21  20  22  21   9   2   0  -1   0   0   0       5   9  13  20  15  13  14  26
 26       23  18  23  21  23  27  22  24  21   4   0   0   0   0   0       5  14  34  39  18  25  29  27
 27       36  33  34  35  32  26  21  25  13   3   1   0   0   0   0  -5   3   8  13  15  13  17  10  10
 28       13   6   5   7   6
 29
 30

MEAN     15. 15. 17. 17. 16. 17. 18. 16.  8. -1. -3. -3. -3. -4. -3. -2.  2.  9. 16. 16. 14. 13. 14. 16.

                 TOTAL NUMBER OF OBSERVATIONS =  7556     MEAN  =    9.
```

TEMPERATURE CHANGE FROM 30' TO 200' (DEG F*10)
TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	4	3	2	5	4	8	9	9	6	2		4	5	6	11	4	6	4	4	12	14	10	13	14
2	12	9	4	13	14	13	11	12	27	29	23	18	16	10	12	14	9	3	1	2	9	3	2	1
3	1	0	0	0	0	0	1	0	1	2	1	1	0	2	2	3	2	3	5	2	2	0	0	0
4	2	4	5	3	3	6	3	5	22	55	58	31	24	33	21	8	0	0	8	0	-7	-10	8	0
5	-14	-17	-1	-14	-12	-13	-23	11	53	45	44	29	21	25	17	12	4	8	17	7	-13	-28	-22	-10
6	-3	13	19	5	11	-4	-5	29	32	23	36	21	20	13	19	8	9	15	29	25	5	15	26	14
7	25	9	-12	9	11	16	20	30	40	6	5	7	3	9	4	3	5	0	12	11	17	12	22	23
8	24	23	21	26	31	39	54	50	23	2	8	5	17	8	10	4	8	7	14	5	19	8	14	15
9	7	9	6	6	6	4	0	2	13	11		26	20	11	12	14	7	-4	0	6	-3	7	-1	12
10	20	11	6	9	6	7	1	0	10	41	40	43	62	31	14	5	4	9	3	6	9	8	1	1
11	4	5	12	15	6	16	20	13	42	35	39	30	22	12	12	14	5	-6	-2	47	38	16	21	17
12	21	20	13	22	25	19	14	17	8	5	9		11	5	6	3	7	9	7	5	-1	0	3	3
13	-1	5	11	10	10	16	30	26	12	3	1	0	5	6	1	4	11	0	-8	13	1	-8	-12	-4
14	-1	-4	0	16	26	44	20	26	43	14	13	20	13	8	2	1	2	9	18	5	3	5	4	7
15	10	14	10	12	10	16	23	35	20	6	8		17	14	5	1	2	13	8	3	-3	1	-2	-13
16	11	1	-14	-18	17	11	-7	-2	36	34	20	28	37	30	23	22	13	13	37	25	0	-20	2	12
17	22	7	16	10	-4	23	27	31	30	15	3	1	6	3	3	3	1	2	15	6	10	10	0	11
18	5	0	0	0	0	-2	-1	0	-2	-6	-4	-4	-8	-4	-2	0	-5	-6	-3	-6	-4	-8	-10	3
19	5	2	-3	5	8	9	0	0	2	7	31	24			3	3	3	15	20	27	33	29	18	8
20	7	15	17	23	13	18	20	25	14	4	10	7	5	5										
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29	21	23	8	0	-5	-30	-21	6	67	59	59	61	26	63	43	32	18	-29	-36	-7	-13	9	11	-3
30	7	-2	5	-16	-23	-21	-4	11	31	42	50	46	28	21	12	11	7							
MEAN	8.	7.	6.	7.	7.	9.	8.	16.	25.	20.	23.	21.	17.	15.	11.	6.	6.	4.	8.	10.	6.	3.	5.	6.

TOTAL NUMBER OF OBSERVATIONS = 5980 MEAN = 11.

APPENDIX A

STABILITY WIND ROSE DIAGRAMS

APPENDIX A

STABILITY WIND ROSE DIAGRAMS

According to the data presented in AEC Safety Guide No. 23, the relationships between stability classes and σ_Θ are as follows (the values shown are averages for each stability classification...σ_Θ is the standard deviation of horizontal wind direction fluctuations).

Stability Classification	Pasquill Categories	Average Values σ_Θ (degrees)
Extremely Unstable	A	25.0°
Moderately Unstable	B	20.0°
Slightly Unstable	C	15.0°
Neutral	D	10.0°
Slightly Stable	E	5.0°
Moderately Stable	F	2.5°

Stability wind roses obtained at the trailers in the monitoring network are displayed in the following tables. Because of the relatively low heights above the surface (9 meters) at which the wind data is taken, the stability distributions are skewed toward the unstable end of the spectrum. That is, the unstable classes (A, B, and C) have a much higher frequency of occurrence than would be obtained with the Pasquill method of stability categorization (or with instruments at higher levels).

Table 1 depicts the frequency distribution of Pasquill stability categories based on σ_Θ from data collected by M. M. Pendergast and T. V. Crawford at the Savannah River Plant ("Actual Standard Deviations of Vertical and Horizontal Wind Direction Compared to Estimates from Other Measurements", Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974). Three distinct range patterns of stability class distributions were observed: low, mid, and high, according to the height at which the σ_Θ measurements were taken.

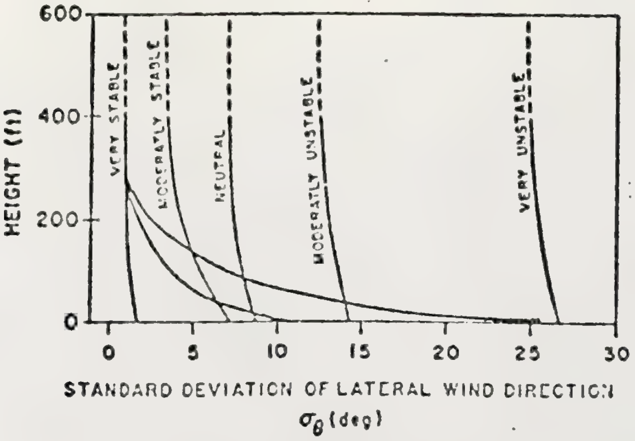
TABLE 1

Frequency distribution of Pasquill Stability Categories

Height, m	Stability Categories based on σ_θ							
	A	B	C	D	E	F	G	
	$\sigma_\theta > 23$	$18 \leq \sigma_\theta < 23$	$13 \leq \sigma_\theta < 18$	$8 \leq \sigma_\theta < 13$	$4 \leq \sigma_\theta < 8$	$2 \leq \sigma_\theta < 4$	$\sigma_\theta < 2$	
10	22.6	13.9	21.8	28.9	8.9	0.4	3.5	LOW RANGE
36	19.3	11.8	19.4	32.4	15.9	0.7	0.5	
91	9.6	6.7	13.5	21.7	29.6	16.4	2.5	MID RANGE
137	9.3	5.8	11.7	20.8	28.5	18.4	5.5	
182	7.0	2.9	6.8	17.1	25.9	25.6	14.7	HIGH RANGE
243	7.7	4.3	9.4	17.7	27.6	22.9	10.4	
304	7.2	3.7	8.0	17.2	28.7	23.9	11.3	

Also, Figure 1 (from D. H. Slade, Meteorology and Atomic Energy, 1968, p. 52) demonstrates that the line representing very stable conditions (which by their nature are associated with light winds) branches into three separate lines near the ground. The curve at the left represents the smallest values of σ_Θ usually observed. The curve that branches off to the right reflects the contribution of very low-level wind direction meander to the total standard deviation. These meandering oscillations decrease in amplitude very rapidly with height under stable conditions. The central curve represents typical inversion conditions. Actually, for a given stability condition, values of σ_Θ will always be greater when the wind is light than when it is strong. This phenomena is most noticeable in the lowest layers.

Figure 1



The vertical variation of the lateral wind-direction standard deviation (σ_θ) for various stability regimes. The curves represent average or typical conditions with the exception of the two outer "very stable" lines, which represent extremes.

The large surface values of σ_Θ for unstable conditions do not decrease very rapidly with height. As in the case of very stable conditions, the greatest lateral fluctuations during a very unstable thermal structure occur with very light winds. As a general rule, for a given insolation condition, increasing wind speeds are associated with profiles of σ_Θ that tend toward neutral stability.

The majority of the trailers in the network recorded very light winds throughout the month. Therefore, the stability distributions had a predominance of high σ_Θ values and, hence, unstable classifications. Those trailers with the highest average winds (and fewest nearby obstacles to the flow) generally had the more reasonable and representative low-level stability class distributions.

```
                                STABILITY WIND ROSE DIAGRAM

                                 ATLANTIC RICHFIELD COMPANY
                           TRAILER NO. -  23    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       A

                                                    WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


   GT   24    :                                                                                  :
  18 -  24    :                                                                                  :
  12 -  18    :                          1   14                                 1    1           :    17
   7 -  12    :                      6  23  198   12   26   11   16   24    5    2    4    1      :   328
   3 -   7    :      1    2    4    58 155  298   72  127   77   39   45   41   18   13    8    3 :   961
   LT    3    :      9    1   65   460 610  428  119  159  110   57   81   93   94   56   33   16 :  2391
    TOTAL     :     10    3   69   524 789  938  203  312  198  112  150  140  115   73   42   19 :  3697
                  ......................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      1482(  40.09 % )
```

```
                                   STABILITY WIND ROSE DIAGRAM

                                    ATLANTIC RICHFIELD COMPANY
                          TRAILER NO. -  20    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -     [illegible]

                                                        WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


  GT   24    :                                                                                  :

 18 -  24    :                                                             1                    :     1

 12 -  16    :                            1   16                           1         1          :    19

  7 -  12    :                           21  167    3    3    3         7    9   12   10    7   :   242

  3 -   7    :   1         2   35  127  236   24   35   18    7   11   57   42   14   19    6 :   634

  LT    3    :   3    2    9  169  254  183   24   23   13    7   30   92   75   28   18    8 :   938

   TOTAL     :   4    2   11  204  403  602   51   61   34   14   48  160  129   53   44   14 :  1834
                 ...........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       473(  25.79 % )
```

```
                                    STABILITY WIND ROSE DIAGRAM

                                  ATLANTIC RICHFIELD COMPANY
                            TRAILER NO. -  20    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       C

                                                                WIND DIRECTION
                   N   NNE   NE   ENE    E   ESE    SE   SSE    S   SSW    SW   WSW    W   WNW   NW   NNW   TOTAL
 WIND SPEED
   MPH

   GT   24    :                                                                                      :
  18 -  24    :                                                                                      :
  12 -  18    :                           1     6                                    2     2         :      11
   7 -  12    :                     6     7   113     1                        2    31    14    24    8     6 :   212
   3 -   7    :    1     1    11   43    92   155     2     3     8             4    69    40    17    7     5 :   458
   LT    3    :    8     8    19  172   275   168    10     6     4            14   106    89    25    6     4 :   914
   TOTAL      :    9     9    30  221   375   442    13     9    12     0      20   208   145    66   21    15 :  1595
                 ......................................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        474(  29.72 % )
```

```
                              STABILITY WIND ROSE DIAGRAM

                              ATLANTIC RICHFIELD COMPANY
                       TRAILER NO. -  20    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -      D

                                                  WIND DIRECTION
                N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

  GT   24   :                                                                                :
 18 -  24   :                                                                                :
 12 -  18   :                                                                                :
  7 -  12   :               1    5    2   65                                 4    4          :    81
  3 -   7   :   1           4   15   45   54    2    1                      22   16    1    2 :   163
  LT    3   :   8    1     16  178  224  115    1    4    1         5     43   39   10    5 :   650
  TOTAL     :   9    1     21  198  271  234    3    5    1    0    5     69   59   11    0    7 :   894
            ....................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      380(  42.51 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                   TRAILER NO. -  20     PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -        F

                                                             WIND DIRECTION
                       N  NNE   NE  ENE   E  ESE   SE  SSE   S  SSW   SW  WSW   W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH


   GT   24    :                                                                                 :
  18 -  24    :                                                                                 :
  12 -  18    :                                                                                 :
   7 -  12    :                          1   13                                                 :   14
   3 -   7    :    2         1    4      5   16     2                      2                    :   32
   LT    3    :    6         1   15     49   31     4                      6    4    2          :  118
   TOTAL      :    8    0    2   19     55   60     6    0    0    0    0   8    4    2    0   0 :  164
                 ...............................................................................

                            TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        83(  50.61 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                     ATLANTIC RICHFIELD COMPANY
                              TRAILER NO. -  20    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -  TOTAL

                                                             WIND DIRECTION
                        N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
  WIND SPEED
     MPH


   GT   24     :                                                                                    :
 18 -   24     :                                                           1                        :     1
 12 -   18     :                            3   36                         4    3    1              :    47
  7 -   12     :               1   17   54  556   16   29   14   16   33   49   32   38   16    6 :   877
  3 -    7     :    6    3   22  155  424  759  102  156  103   46   60  191  116   45   34   16 :  2248
   LT    3     :   33   15  108  983 1408  939  153  182  122   60  130  362  318  127   62   35 :  5037
    TOTAL      :   39   18  131 1155 1889 2290  271  377  239  122  223  607  469  211  112   57 :  8210
                 ..........................................................................................

                              TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      2892(  35.23 % )


                                 PERCENTAGE OF      A STABILITY -  45.03 %
                                 PERCENTAGE OF      B STABILITY -  22.34 %
                                 PERCENTAGE OF      C STABILITY -  19.43 %
                                 PERCENTAGE OF      D STABILITY -  10.89 %
                                 PERCENTAGE OF      E STABILITY -   2.00 %
```

```
                                      STABILITY WIND ROSE DIAGRAM

                                      ATLANTIC RICHFIELD COMPANY
                                TRAILER NO. -  21    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       A

                                                        WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH


   GT   24   :                                                                                   :

 18  -  24   :                                                                         1         :     1

 12  -  18   :                                      9    3         1                   4    1    :    18

  7  -  12   :                       25  136   28  106   57   15    0    1    4    3   10   27    4 :   416

  3  -   7   :    7    4    6   32  253  251  213  138   64   24   14   26   13   87   89   25 :  1256

  LT    3    :   44   26   34   68  233  344  372  243  130   59   40   48   45  100  127   86 :  1999

   TOTAL     :   51   30   40  125  622  633  700  441  209   84   55   78   61  197  248  116 :  3690
             ...................................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       929(  25.18 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                     ATLANTIC RICHFIELD COMPANY
                               TRAILER NO. -  21    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       F

                                                           WIND DIRECTION
                     N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW  TOTAL
 WIND SPEED
   MPH


  GT    24     :                                                                                                 :
 18 -   24     :                                                                                         1       :     1
 12 -   18     :                                            10                                   1     3     2     2 :    18
  7 -   12     :     1     1          15    79    29    73    12     1     1     3     3     4     5    34     3 :   264
  3 -    7     :     3     0     1    16   130   176   126    40     6     5     4     4    10    42    76    13 :   652
  LT     3     :    13     7     4    20    96   176   119    71    16     6     8    12    25    56    60    29 :   718
   TOTAL       :    17     8     5    51   305   381   328   123    23    12    15    19    40   106   173    47 : 1653
                 ..................................................................................................

                          TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       400(  24.20 % )
```

```
                              STABILITY WIND ROSE DIAGRAM

                                ATLANTIC RICHFIELD COMPANY
                         TRAILER NO. - 21    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -     C

                                                    WIND DIRECTION
WIND SPEED        N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
   MPH

  GT   24   :                                                                                :
 18 -  24   :                                                                                :
 12 -  18   :                          1         2                        1          1       :     5
  7 -  12   :          1        11  148   62   29    2    1              1    2    9   28    8 :   302
  3 -   7   :     2    0        22  203  152   67   20    3    4    2    1   17   43   60    6 :   602
  LT    3   :    27    1    1   23  140  130   78   32    5    2    2    1   23   43   59   21 :   588
   TOTAL    :    29    2    1   56  492  344  176   54    9    6    4    3   43   95  148   35 :  1497
             ......................................................................................

                   TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      336(  22.44 % )
```

```
                                    STABILITY WIND ROSE DIAGRAM

                                    ATLANTIC RICHFIELD COMPANY
                          TRAILER NO. -  21    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -        F

                                                     WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24   :                                                                                :
   18 -  24  :                                                                           3     :     3
   12 -  18  :                                                                           2     :     2
    7 -  12  :                          2    1         1                                  1     :     5
    3 -   7  :    1               4     9    5         0                             2    1    1 :    23
   LT    3   :    2    3         34    29   11    3    0                             4    2   15 :   103
    TOTAL    :    3    3    0    38    40   17    3    1    0    0    0    0    0    6    9   16 :   136
             ...........................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       88(  64.71 % )
```

CORPORATION

```
                                          STABILITY WIND ROSE DIAGRAM

                                        ATLANTIC RICHFIELD COMPANY
STABILITY CLASS -  TOTAL          TRAILER NO. -  21    PERIOD(11/ 1/74 TO 11/30/74)

                                                              WIND DIRECTION
 WIND SPEED       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
    MPH

   GT   24   :
                                                                                                :
   16 -  24  :                                                                          19    1 :   60
   12 -  16  :                        1        22    3         1              2    6   70    5 :  110
    7 -  12  :    1    2        55  459  140  215   73   17    1    4    8    9   44  110   16 : 1184
    3 -   7  :   14    4    8   99  703  655  421  201   73   34   20   31   47  240  297   55 : 2863
   LT     3  :  108   41   41  155  568  734  601  365  155   71   52   65  100  231  321  185 : 3792
    TOTAL    :  123   47   49  309 1731 1530 1259  642  245  107   76  164  158  461  885  262 : 8009
             ......................................................................................

                  TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      1971(  24.61 % )


                        PERCENTAGE OF       A STABILITY -  46.07 %
                        PERCENTAGE OF       B STABILITY -  20.64 %
                        PERCENTAGE OF       C STABILITY -  18.69 %
                        PERCENTAGE OF       D STABILITY -  12.55 %
                        PERCENTAGE OF       E STABILITY -   1.70 %
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                       ATLANTIC RICHFIELD COMPANY
                                  TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -      A

                                                                       WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24   :
   18 - 24   :                                                                                     :
   12 - 16   :                                   2                                                 :     2
    7 - 12   :          1             42    6                              4    3    2             :    58
    3 -  7   :          0    2   32  150   65   19    2    2    3   16   52   34   10    3    1  :   391
   LT    3   :    12   30   81  190  182  142   69   20   20   35   73   98   76   27   26   16  :  1117
   TOTAL     :    28  113  144  202  123   80   44   34   37   52   71   77   43   32   23   19  :  1122
             :    40  144  227  424  499  293  132   56   59   90  160  231  156   71   52   36  :  2670
              .......................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        399(  14.94 % )
```

```
                                   STABILITY  ND ROSE DIAGRAM

                                    ATLANTIC RICHFIELD COMPANY
                           TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -      B

                                                          WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
    MPH


   GT   24   :                                                                                :

  18 -  24   :                                                                                :

  12 -  18   :                           14                                   6    1          :   21

   7 -  12   :    1                29   114   12                       10   35   31    2       :  234

   3 -   7   :    9   15   44  143   120   26   11         4    8   63   77   47    3    2    6 :  578

    LT   3   :   10   33   53  102    71   37    8    4   14   22   28   36   20    5    0   12 :  455

     TOTAL   :   20   48   97  274   319   75   19    4   18   30  101  154   99   10    2   18 : 1288
             ...........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       199(  15.45 % )
```

```
                                                  STABILITY WIND ROSE DIAGRAM

                                               ATLANTIC RICHFIELD COMPANY
                                        TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       C

                                                                             WIND DIRECTION
                          N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW  TOTAL
 WIND SPEED
    MPH


   GT   24    :                                                                                                   :
 18 -   24    :                                                                                                   :
 12 -   18    :                       5   108                                         1     6     2     1         :   123
  7 -   12    :                 1     9   192   657     5                             6    98    24     0         :   992
  3 -    7    :          11     6   100   315   343    22     6     2     1     4    30    98    18     3     1     7 :   967
   LT    3    :          11    35    74   139   103    29     8     2     3     5    10    31    18     4     4    10 :   494
    TOTAL     :          22    42   183   651  1211    56    14     4     4     9    55   233    62     8     5    17 :  2576
             ......................................................................................................................
                              TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       220(   8.54 % )
                              STABILITY  ND ROSE DIAGRAM

                               ATLANTIC RICHFIELD COMPANY
                         TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -      D

                                               WIND DIRECTION
                  N  NNE  NE  ENE   E  ESE  SE  SSE   S  SSW  SW  WSW   W  WNW  NW  NNW  TOTAL
WIND SPEED
   MPH

  GT   24   :                                                                        :
 18 -  24   :                                                                        :
 12 -  18   :                  9  127                                                :   136
  7 -  12   :   1        3  116  554                   1   1   25   3              1 :   705
  3 -   7   :  16       35   97  196    3   1          0   8   34   7              4 :   401
   LT   3   :  15   10  20   51   57   12   2    1     0   6    8   6    1    3    8 :   200
   TOTAL    :  32   10  58  273  934   15   3    1  0  1  15   67  16    1    3   13 :  1442
            ..........................................................................

                  TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       105(   7.28 % )
```

```
                         STABILITY WIND ROSE DIAGRAM

                         ATLANTIC RICHFIELD COMPANY
                TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -      E
                                               WIND DIRECTION
              N  NNE  NE  ENE   E  ESE  SE  SSE   S  SSW  SW  WSW   W  WNW  NW  NNW  TOTAL

 WIND SPEED
   MPH
                                                                                   :
  GT   24   :                                                                      :
 13 -  24   :                                                                      :    29
 12 -  18   :                    1   28                                            :   104
  7 -  12   :                    4  100                                          4 :    28
  3 -   7   :                    6   15                1            1    1       8 :    52
  LT    3   :  12    3    1     11   15    1    1      0            0    0      12 :   213
  TOTAL     :  12    3    1     22  158    1    1   0  1    0   0   1    1   0   0 
..........................................................................................

         TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          32(  15.02 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                TRAILER NO. -  22    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -  TOTAL

                                                                WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


  GT   24    :                                                                                :

  18 -  24    :                          2                                                     :     2

  12 -  18    :          1        15  319    6                           1   16    6    3      :   367

   7 -  12    :    2     1   14  373 1575   82   19    2    2    4   33  210   92   12    3    2 :  2426

   3 -   7    :   48    51  256  751  656  193   87   22   26   47  174  308  149   33   29   37 :  3071

  LT    3    :   75   195  295  512  375  161   64   43   55   80  124  155   88   43   32   56 :  2354

   TOTAL     :  125   243  570 1651 3127  442  174   67   83  131  332  689  335   91   64   95 :  8224
                 ..........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       955(  11.62 % )


                               PERCENTAGE OF       A STABILITY -  32.48 %
                               PERCENTAGE OF       B STABILITY -  15.67 %
                               PERCENTAGE OF       C STABILITY -  31.34 %
                               PERCENTAGE OF       D STABILITY -  17.54 %
                               PERCENTAGE OF       E STABILITY -   2.59 %
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. = 24    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -        A

                                                           WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH


    GT   24   :                                                                                  :
 18 -    24   :                                        1    6    2                                :    9
 12 -    18   :                                        7    9   14    4         6    1    2       :   43
  7 -    12   :             2    3    3   13   35   82   47   26    4    8    8   12    2       :  245
  3 -     7   :       8   38  155  163   59   59  122   86   43   18   21   24   25   13       :  854
   LT     3   :      22  107  351  299  159   92  104  105   57   45   41   70   56   34    9   14 : 1565
   TOTAL      :      30  147  509  465  231  186  316  253  142   71   70  108   94   51    9   14 : 2716
                     ........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        907(  33.39 % )
```

```
                                        STABILITY WIND ROSE DIAGRAM

                                         ATLANTIC RICHFIELD COMPANY
                                TRAILER NO. -  24    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       B

                                                            WIND DIRECTION
                       N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH

   GT   24   :                                                                                   :
 18  -  24   :                                       4    9    5                                 :    18
 12  -  18   :                            1    1    14   12   21    3    3    4   14              :    73
  7  -  12   :           3    3    2      4    3    40   53   23   14   11   33   15    2         :   206
  3  -   7   :      2   20   66   94     36   18    35   39   29   27   31   37   15    1       1 :   451
   LT    3   :     19   44  130  139     48    9    34   32   29   35   37   32   24    6    5  6 :   629
   TOTAL     :     21   67  199  235     89   31   127  145  107   79   82  106   68    9    5  7 :  1377
               ...........................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        324(  23.53 % )
```

```
                                       STABILITY WIND ROSE DIAGRAM

                                        ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. -  24    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -       C

                                                                   WIND DIRECTION
                      N   NNE    NE   ENE     E   ESE    SE   SSE     S   SSW    SW   WSW     W   WNW    NW   NNW  TOTAL
  WIND SPEED
     MPH

   GT   24    :                                                             1                                   :     1

  18 -  24    :                                                       4     1           1     1                 :     7

  12 -  18    :                                 1           4    10     8     4           5     9     2     1     :    44

   7 -  12    :       1     1     2     2     5     2    21    36    10     7    14    27    28     5     4       :   165

   3 -   7    :       4    17    69   168    80    20    26    27    13    16    17    36    18     6     0     2 :   519

   LT    3    :       8    27    94   197    87    15    23    20    18    17    27    50    30    11     2    14 :   640

    TOTAL     :      13    45   165   367   173    37    74    93    53    46    58   119    86    24     7    16 :  1376
                 ....................................................................................................

                              TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        301(  21.87 % )
```

```
                                      STABILITY WIND ROSE DIAGRAM

                                        ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. -  24    PERIOD(11/ 1/74 TO 11/30/74)
 STABILITY CLASS -        D

                                                                WIND DIRECTION
                         N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
   WIND SPEED
      MPH


    GT   24   :                                                                                    :
   18 -  24   :                                                           1                        :     1
   12 -  18   :                                          3    5    1              3    2    2      :    16
    7 -  12   :               3    3         2         5   12    4    7    3   12   10    1    3      :    65
    3 -   7   :          6   24  202  252   69    6   10    8    8    9    9    6    5    6    0    1 :   621
    LT    3   :          8   37  207  246   63    1    3    3    3    4    8    9    2    9    2    8 :   613
     TOTAL    :         14   64  412  498  134    7   18   26   20   21   20   27   21   18    7    9 :  1316
              ...........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        298(  22.64 % )
```

```
                                        STABILITY WI   ROSE DIAGRAM

                                      ATLANTIC RICHFIELD COMPANY
                                 TRAILER NO. -  24    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -        E

                                                                WIND DIRECTION
                    N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH

  GT   24   :                                                                                  :
 18 -  24   :                                                                                  :
 12 -  18   :                                                                                  :
  7 -  12   :         1                  1                   1    1         3                  :     7
  3 -   7   :   1     3   60   60   14    2    4           0    3    4    0                 1 :   152
  LT    3   :   1     8   55   92   13    2    3           0    1    1    1              1  0 :   178
  TOTAL     :   2    12  115  152   28    4    7    0    1    5    5    4    0    0    1    1 :   337
                  ..........................................................................................

                         TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       104(  30.86 % )
```

CORPORATION

```
                                   STABILITY  ND ROSE DIAGRAM

                                  ATLANTIC RICHFIELD COMPANY
                          TRAILER NO. -  24    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -  TOTAL

                                                  WIND DIRECTION
                 N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
    MPH

   GT   24   :                                                1                              :    1

   18 - 24   :                                 5   15   11    1         1    2               :   35

   12 - 18   :                        2    1   25   34   46   12    3   15   27    6    3      :  176

    7 - 12   :   1   10   11    7   25   40  148  148   64   33   36   83   65   10    7      :  688

    3 -  7   :  21  102  552  757  258  105  197  160   93   73   82  103   63   26    0    5 : 2597

   LT    3   :  60  222  847 1010  378  110  154  149  103  103  116  164  112   60   21   44 : 3653

    TOTAL    :  82  334 1410 1774  663  255  529  506  319  223  237  366  269  102   31   49 : 7150
             ..........................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      1934(  27.05 % )


                          PERCENTAGE OF      A STABILITY -  37.99 %
                          PERCENTAGE OF      B STABILITY -  19.26 %
                          PERCENTAGE OF      C STABILITY -  19.24 %
                          PERCENTAGE OF      D STABILITY -  18.41 %
                          PERCENTAGE OF      E STABILITY -   4.71 %
```

```
                                   STABILITY WIND ROSE DIAGRAM

                          ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                           LEVEL =   8 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - A
                                                   WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
  WIND SPEED
    MPH
    GT   24     :                                                                                  :
  16 -   24     :                                             1    2                               :     3
  12 -   16     :                                            13   12    1    1                     :    27
   7 -   12     :                             3    8    8    40   36   16    5    3                :   119
   3 -    7     :     2   10   21   37   36   30   54   47   35   67   47   19    9    3    9   15   :   441
    LT    3     :     7   29   42   67   64   57   60   72   84  114   71   19   23   16   18   16   :   759
     TOTAL      :     9   39   63  104  100   90  122  127  173  231  135   44   35   19   27   31   :  1349
                  ..........................................................................................

                        TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        326(  24.17 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                    ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                      LEVEL =   8 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - B
                                                      WIND DIRECTION
                    N  NNE   NE  ENE   E  ESE   SE  SSE   S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
  WIND SPEED
    MPH
    GT   24    :                                                                             :
  18 -   24    :                                          3   21    1                        :    25
  12 -   18    :                                          7   37    5    2    1              :    52
   7 -   12    :                          1    4    6    7   40   17   13    4    2    1    1 :    96
   3 -    7    :    1    2    7    6   22   35   37   34   22   21   82   19    8    9   11   10 :   326
    LT    3    :    1    8   11    4    9    9   11   13   11   19   42   11    7    0    6    8 :   170
     TOTAL     :    2   10   18   10   31   45   52   53   50  138  147   45   20   11   18   19 :   669
                ....................................................................................

              TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -         44(   6.58 %)
```

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - C

WIND SPEED MPH		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 24	:																	:	
18 - 24	:									4	14							:	18
12 - 18	:									2	26	7	1	2			4	:	42
7 - 12	:							3	11	7	18	13	4	1	25	28	19	:	129
3 - 7	:	5	3	4	9	38	52	43	22	14	18	90	33	32	25	19	14	:	421
LT 3	:	1	4	3	2	4	8	8	3	4	14	37	11	8	2	7	1	:	117
TOTAL	:	6	7	7	11	42	60	54	36	31	90	147	49	43	52	54	38	:	727

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 26(3.58 %)

CORPORATION

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                               STABILITY WIND ROSE DIAGRAM

                      ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                        LEVEL =    8 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - D
                                                            WIND DIRECTION
                    N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW   TOTAL
 WIND SPEED
   MPH
   GT   24     :                                                                                :
 18 -   24     :                                             1    2                            1 :      4
 12 -   18     :                                             0   14    1                   1   30 :     46
  7 -   12     :                              2    4    6    3    0              3   15   27 :     60
  3 -    7     :    2    3    2    3   19   19   26   11    8    5   17    1    2   11    8   28 :    165
   LT    3     :    2    2    1    4    4    2    1    0    2    2    4    0    0    2    4   24 :     54
    TOTAL      :    4    5    3    7   23   21   29   15   17   26   22    1    2   16   28  110 :    329
..........................................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        14(   4.26 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                  ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                     LEVEL =    8 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - E
                                                      WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24    :                                                                                :
 18 -   24    :                                                                                :
 12 -   18    :                                                                                :
  7 -   12    :                                                                                :
  3 -    7    :    2    1    1         1    3    4              1    2                     38 :    53
   LT    3    :    5    5    1    1    2    1    0              1    0                     30 :    46
    TOTAL     :    7    6    2    1    3    4    4    0    0    2    2    0    0    0    0   68 :    99
                ...................................................................................

                  TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          5(    5.05 %)
```

```
                                   STABILITY WIND ROSE DIAGRAM

                      ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                        LEVEL =   8 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - TOTAL
                                                         WIND DIRECTION
                  N   NNE   NE   ENE    E   ESE   SE   SSE    S   SSW   SW   WSW    W   WNW   NW   NNW  TOTAL
 WIND SPEED
  MPH
  GT   24    :                                                                                    :
 18 -  24    :                                             9    39    1                       1 :   50
 12 -  18    :                                            22    89   14    4     3          1   34 :  167
  7 -  12    :                              4   17   29   60    97   46   22     8   30   44   47 :  404
  3 -   7    :   12   19   35   55  116  139  164  114   79   112  238   72    51   48   47  105 : 1406
   LT   3    :   18   48   54   70   83   82   80   82   94   136  170   45    42   25   39   96 : 1164
   TOTAL     :   30   67   89  125  199  225  261  225  264   473  469  143   104  103  131  283 : 3191
             ......................................................................................

                 TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      415(  13.01 %)


                      PERCENTAGE OF A      STABILITY -  42.28 %
                      PERCENTAGE OF B      STABILITY -  20.97 %
                      PERCENTAGE OF C      STABILITY -  22.78 %
                      PERCENTAGE OF D      STABILITY -  10.31 %
                      PERCENTAGE OF E      STABILITY -   3.10 %
```

```
                                      STABILITY WIND ROSE DIAGRAM

                         ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                            LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - A
                                                   WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24    :                                                                                 :
 18 -   24    :                                                                                 :
 12 -   18    :                                                                                 :
  7 -   12    :                                                                                 :
  3 -    7    :                                                                                 :
   LT    3    :                                                                                 :
    TOTAL     :   0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                 ...................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -         0(   0.00 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                  ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                    LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS = B
                                              WIND DIRECTION
                 N  NNE  NE  ENE   E  ESE  SE  SSE   S  SSW  SW  WSW   W  WNW  NW  NNW TOTAL
 WIND SPEED
   MPH
   GT  24   :                                                                    :
 18 -  24   :                                                                    :
 12 -  18   :                                                                    :
  7 -  12   :                                                                    :
  3 -   7   :                                                                    :
   LT   3   :                                                                    :
    TOTAL   :    0    0   0    0   0    0   0    0   0    0   0    0   0    0   0    0 :    0
            ...........................................................................

        TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          0(   0.00 %)
```

```
                                     STABILITY WIND ROSE DIAGRAM

                        ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                          LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - C
                                                           WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  NNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
    GT   24    :
                                                                                                 :
  18 -   24    :
                                                                                                 :
  12 -   18    :
                                                                                                 :
   7 -   12    :
                                                                                                 :
   3 -    7    :
                                                                                                 :
    LT    3    :
                                                                                                 :
    TOTAL      :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :    0
                ..............................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          0(   0.00 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                     ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                        LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - D
                                                           WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
    MPH
    GT   24    :                                                                                :

  18 -   24    :                                                                                :

  12 -   18    :                                                                                :

   7 -   12    :                                                                                :

   3 -    7    :                                                                                :

    LT    3    :                                                                                :

     TOTAL     :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :     0
                 ...................................................................................................

                      TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        0(   0.00 %)
```

```
                           STABILITY WIND ROSE DIAGRAM

                 ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                   LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - E
                                                      WIND DIRECTION
                   N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24   :                                                                                   :
  18 -  24   :                                                                                   :
  12 -  18   :                                                                                   :
   7 -  12   :                                                                                   :
   3 -   7   :                                                                                   :
   LT    3   :                                                                                   :
    TOTAL    :     0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0  :    0
                 ........................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        0(   0.00 %)
```

```
                                   STABILITY WIND ROSE DIAGRAM

                           ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                             LEVEL =  30 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - TOTAL

                                                       WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24     :                                                                                :
 18 -   24     :                                                                                :
 12 -   18     :                                                                                :
  7 -   12     :                                                                                :
  3 -    7     :                                                                                :
   LT    3     :                                                                                :
    TOTAL      :    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 :     0
               ....................................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        0(   0.00 %)


                          PERCENTAGE OF A      STABILITY -   0.00 %
                          PERCENTAGE OF B      STABILITY -   0.00 %
                          PERCENTAGE OF C      STABILITY -   0.00 %
                          PERCENTAGE OF D      STABILITY -   0.00 %
                          PERCENTAGE OF E      STABILITY -   0.00 %
```

```
                                  STABILITY WIND ROSE DIAGRAM

                      ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                        LEVEL = 100 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - A

                                                      WIND DIRECTION
                N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
  MPH
  GT  24   :                                   7    3    3                                   :   13

 18 - 24   :                              2    9   14   13                       3    1    2 :   44

 12 - 18   :                   2   12   19   55   69   55    1         1    3    2    3    0 :  222

  7 - 12   :    1    3    5   13   79   81   60  102   68   41   14    7   10   13    8    0 :  525

  3 -  7   :   31   36   43   88  109  126  130  117   73   35   31   50   65   67   48   39 : 1093

  LT   3   :   32   29   25   18   33   41   34   30   22   13   24   28   18   22   24   27 :  415

  TOTAL    :   64   68   73  121  233  269  295  335  234   90   69   86   96  107   84   68 : 2292
           ...........................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      101(   4.41 %)
```

```
                                     STABILITY WIND ROSE DIAGRAM

                        ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                          LEVEL = 100 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - A
                                                                 WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
    MPH
    GT   24   :                                     3   22   20    4    1                           :   50

   18 -  24   :                           1    1    2   50   33   14    1    1         5         1  :  109

   12 -  18   :                      1    3   32   52  161  162   35    9    2    4   12    2    1  :  476

    7 -  12   :            1    1   10   64   97   99  138  107   39   29   19   24   17    6    6  :  657

    3 -   7   :   15   22   15   36   45   56   51   65   51   68   49   45   41   22   23   20  :  624

     LT   3   :    5   11    2   10    6   13   12    9   10   10   12    6    5    4    8    5  :  128

      TOTAL   :   20   34   18   57  119  199  219  445  383  170  101   73   74   60   39   33  : 2044
               ..........................................................................................

                       TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        34(   1.66 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                     ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                       LEVEL = 100 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - C
                                                        WIND DIRECTION
                    N   NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
   MPH
   GT   24    :                                    2   31   12         3                            :   48

 18 -   24    :                               1    4   45   15   17    3    1         1    1    2 :   90

 12 -   18    :                          3   28   31   69   84   20   18    7   34   20    4    1 :  319

  7 -   12    :   7         2   22  100  128   48   69   69   45   55  128  151   25   15    8 :  872

  3 -    7    :  11   31   45   38   84   85   43   48   51   61   47   86   46   42   23   26 :  767

   LT    3    :   5    8    7   10   12    8   13    5    6   12   12    8    6    4    6    8 :  130

    TOTAL     :  23   39   54   70  199  250  141  267  237  155  138  230  237   92   49   45 : 2226
                ...................................................................................

                     TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        28(   1.26 %)
```

```
                              STABILITY WIND ROSE DIAGRAM

                 ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                   LEVEL = 100 FEET   PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - D
                                                        WIND DIRECTION
                     N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
    MPH
   GT   24   :                                     1   18    3                                1         :    23
  18 -  24   :                                     0   17    4    1                     13   25    1 :    61
  12 -  18   :     2                 1    5    9   18   18   18    0    2    5   42   47   46    1 :   214
   7 -  12   :     8    3    3   21   52   68   18   20   26    1    2   42  102   81   38   23 :   508
   3 -   7   :    22   25   35   34   54   53   15   20    8    5    5   29   20   41   52   29 :   448
   LT    3   :    13   16   11    8    7    8    8    1    2    0    2    6    4    4    8   11 :   109
    TOTAL    :    45   44   50   64  118  138   60   94   61    7   11   82  168  186  170   65 :  1363
             ..........................................................................................

                    TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        11(   0.81 %)
```

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - E

WIND DIRECTION

WIND SPEED MPH		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 24	:								1							2		:	3
18 - 24	:								0							2	1	:	3
12 - 18	:						4	4	1	1						0	0	:	10
7 - 12	:	5			4	18	26	8	2	4				4	4	17	9	:	101
3 - 7	:	10	2	10	15	18	19	13	5	3	5		4	5	11	20	42	:	182
LT 3	:	10	6	2	3	0	1	1	0	1	0		2	0	0	2	10	:	38
TOTAL	:	25	8	12	22	36	50	26	9	9	5	0	6	9	15	43	62	:	337

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 6(1.78 %)

```
                                        STABILITY WIND ROSE DIAGRAM

                              ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                                LEVEL = 100 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - TOTAL

                                                              WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
   MPH
   GT   24    :                                    13   75   38    4    4                   3       :  137
 18 -   24    :                             1    4   15  126   65   32    4    2        22   29    7 :  307
 12 -   18    :    2                   4   23   92  160  318  320   56   29   15   83   81   55    3 : 1241
  7 -   12    :   21    7   11   70  313  400  233  331  274  126  100  196  291  140   84   46 : 2643
  3 -    7    :   39  116  154  211  310  339  252  255  186  174  132  214  177  183  216  156 : 3114
   LT    3    :   68   72   46   50   60   72   69   45   42   36   52   53   34   36   51   63 :  849
    TOTAL     :  130  195  211  335  707  907  742 1150  925  428  321  480  585  462  438  275 : 8291
              ......................................................................................

                  TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      180(   2.17 %)


                            PERCENTAGE OF A      STABILITY -  27.64 %
                            PERCENTAGE OF B      STABILITY -  24.65 %
                            PERCENTAGE OF C      STABILITY -  26.85 %
                            PERCENTAGE OF D      STABILITY -  16.44 %
                            PERCENTAGE OF E      STABILITY -   4.06 %
```

```
                              STABILITY WIND ROSE DIAGRAM

                   ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                     LEVEL = 240 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - A
                                                     WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24    :                                            61    3                                 :   64

 18 -   24    :                                  4    1   48   15                     2         1 :   72

 12 -   18    :        1                3    7   16   45  106   40    3         3    6    3    1 :  234

  7 -   12    :   1    2    1    2   12   47   60   72  164   61   21   11   12   10   11    5 :  492

  3 -    7    :  24   30   36   22   30   66   75  131  131   58   37   48   48   60   46   50 :  892

   LT    3    :  42   40   52   48   39   49   43   60   61   34   32   40   39   44   43   56 :  722

    TOTAL     :  67   73   89   72   84  169  198  339  571  212   93   99  102  122  103  113 : 2476
               ..........................................................................................

                   TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        189(   7.63 %)
```

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - B

WIND SPEED MPH		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		TOTAL
GT 24	:								4	37	19	4	1				.	:	65
18 - 24	:							2	4	57	43	16	1		2		1	:	126
12 - 18	:					1	4	17	46	171	90	20	3		7	1	1	:	361
7 - 12	:			2		8	25	74	83	133	74	33	16	11	11	8	5	:	483
3 - 7	:	10	7	9	11	15	27	41	72	62	23	36	37	39	31	27	32	:	479
LT 3	:	6	13	10	16	19	18	21	24	15	16	11	17	17	12	11	25	:	251
TOTAL	:	16	20	21	27	43	74	155	233	475	265	120	75	67	63	47	64	:	1765

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 70(3.97 %)

```
                              STABILITY WIND ROSE DIAGRAM

                  ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                    LEVEL = 200 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - C
                                                     WIND DIRECTION
                    N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
  MPH
   GT   24   :                                       11   12   16    3    2                     :    44
  16 -  24   :                                   3   14   45   19   17   10    2    1    2    4 :   117
  12 -  18   :                          1    8   27   75  137   56   23   14   15   12   12    2 :   382
   7 -  12   :      3         2    3   11   68  118   64   80   45   46   45  146   60   24    4 :   719
   3 -   7   :     13    8   16   19   37   74   64   58   38   28   29   38  111   88   41   34 :   696
   LT    3   :      8   11   17   13    9   16   18   17   15    9    9   15   14   10   18   24 :   223
   TOTAL     :     24   19   35   35   58  166  230  239  327  173  127  124  288  171   97   68 :  2181
              ...........................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -          53(    2.43 %)
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                                       STABILITY WIND ROSE DIAGRAM

                          ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                            LEVEL = 200 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - D
                                                            WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
   MPH
   GT   24   :                                       5    8    1                             4      :   18

  18 -  24   :                             1    1   12   12    1    1    5         2   43    3 :   81

  12 -  18   :    2                        9   16   30   21   14    1    1   16   34   56   13 :  213

   7 -  12   :   11    1    3    5    8   40   71   33   19    4    9   10   65   95   51   20 :  445

   3 -   7   :   16   16   15   30   29   45   22   20   14   10   10   13   45   63   60   44 :  469

   LT    3   :   10   19   21    7   13   13    9    3   10    3    1    0    5   14   21   23 :  172

    TOTAL    :   39   36   39   42   50  109  119  103   82   33   22   29  131  228  235  103 : 1398
              ...........................................................................................

                   TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        42(   3.00 %)
```

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                          STABILITY WIND ROSE DIAGRAM

              ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                LEVEL = 200 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - E

                                                 WIND DIRECTION
                  N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24  :                                                1                          2    1 :     4

 18 -   24  :                                  2    3    1    1                         2    1 :    10

 12 -   18  :                            1    3   14    5    0    1         1           0    3 :    28

  7 -   12  :     5         1    3    2   11   28    1    4    0    1         0    4   31   16 :   107

  3 -    7  :    17    7    4    6   10   19    3    3    5    2    2    1    1   13   42   26 :   161

   LT    3  :    13    7    6    4    4    3    0    1    0    2    0    1    0   10   19   11 :    81

   TOTAL    :    35   14   11   13   16   34   36   22   16    5    4    2    2   27   96   58 :   391
           ........................................................................................

                TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -        28(   7.16 %)
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                              STABILITY WIND ROSE DIAGRAM

                  ATLANTIC RICHFIELD COMPANY METEOROLOGICAL TOWER SITE
                    LEVEL = 200 FEET  PERIOD(11/ 1/74 TO 11/30/74)

STABILITY CLASS - TOTAL
                                                WIND DIRECTION
                 N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
 WIND SPEED
   MPH
   GT   24   :                                    20  119   39    7    3              6    1 :  195

  18 -  24   :                             1   12   34  163   80   34   16    2    7   47   10 :  406

  12 -  18   :    2    1              5   29   79  210  440  200   48   18   35   59   72   20 : 1218

   7 -  12   :   20    3    9   13   41  191  351  253  400  184  110   82  234  180  125   50 : 2246

   3 -   7   :   80   68   80   88  121  232  205  284  246  121  114  137  244  275  216  186 : 2697

   LT    3   :   80   91  108   90   87  102   94  104   99   66   54   74   79   94  115  140 : 1477

    TOTAL    :  182  163  197  191  254  555  741  905 1467  690  367  330  594  615  581  407 : 8239
              ...........................................................................................

                  TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -       382(   4.64 %)


                         PERCENTAGE OF A      STABILITY -  30.05 %
                         PERCENTAGE OF B      STABILITY -  21.42 %
                         PERCENTAGE OF C      STABILITY -  25.47 %
                         PERCENTAGE OF D      STABILITY -  16.97 %
                         PERCENTAGE OF E      STABILITY -   4.75 %
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```
                                     STABILITY WIND ROSE DIAGRAM

                                    ATLANTIC RICHFIELD COMPANY
                             TRAILER NO. -  21    PERIOD(11/ 1/74 TO 11/30/74)
STABILITY CLASS -        D

                                                              WIND DIRECTION
                      N  NNE   NE  ENE    E  ESE   SE  SSE    S  SSW   SW  WSW    W  WNW   NW  NNW  TOTAL
  WIND SPEED
     MPH


   GT   24   :                                                                                  :

 18 -   24   :                                                                       54    1 :    55

 12 -   18   :                                    1                              3   61    2 :    67

  7 -   12   :                     4   94   20    7    1                        20   50    1 :   197

  3 -    7   :    1         1     25  108   62   15    3         1          7   26   71   10 :   330

   LT    3   :   20    4    0     27   77   66   15   10         0     1    4   26   68   39 :   357

    TOTAL    :   21    4    1     56  279  148   38   14    0    1    0    1   11   75  304   53 :  1006
               ...........................................................................................

                         TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE -      218(  21.67 % )
```